# PARTS MASTER

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - PRODUCT IDENTIFICATION AND USE

**Product Name:** 15W40
**Product Class:** Lubricant
**WHMIS Classification:** Not controlled.

**Supplier Name and Address:** Aftermarket Auto Parts Alliance, Inc.
San Antonio, TX 78258. USA

**Phone:** (506) 633-3732
**Emergency:** (506) 648-3060

## SECTION 2 - HAZARDOUS INGREDIENTS OF MATERIALS

| Hazardous Ingredients | CAS# | wt% | ACGIH-TLV | $LC_{50}$ | $LD_{50}$ |
|---|---|---|---|---|---|
| None | | | 5 mg/m$^3$ (oil mist) | | |

## SECTION 3 - PHYSICAL DATA AND CHEMICAL PROPERTIES

**Form:** Liquid
**Colour:** Brown
**Odour:** Petroleum
**Specific Gravity @ 15°C:** 0.86 - 0.90
**Solubility:** Negligible

**Vapour Pressure (mm @ 20°C):** < 0.10
**Volatile (wt%):** 0

## SECTION 4 - FIRE AND EXPLOSION HAZARD

**Flammability:** ☒Yes ☐ No
**Flash Point :** > 218°C (COC)

**Conditions:** Open flame above flash point.

**Upper Flammable Limit:** Not established.
**Auto Ignition Temperature:** Not determined.
**Sensitivity to Impact:** None.

**Lower Flammable Limit:** Not established.
**TDG Flammability Classification:** Not classified.
**Sensitivity to Static Discharge:** None.

**Means of Extinction:** Dry chemical, water spray (fog), foam or carbon dioxide.
**Hazardous Combustion Products:** Hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.
**Special Procedures:** Water foam may cause frothing. Use water to cool exposed containers. Use self-contained breathing apparatus for fire fighting.

## SECTION 5 - REACTIVITY DATA

**Stability:** This product is stable.
**Hazardous Polymerisation:** Will not occur.
**Conditions to avoid:** Extremely high temperatures.
**Incompatibility with other substances:** Strong oxidising agents.
**Hazardous decomposition products:** Thermal decomposition from high temperature or combustion will produce hydrogen sulphide and oxides of carbon, nitrogen, sulphur and phosphorus.

## SECTION 6 - TOXICOLOGICAL PROPERTIES

**Route of Entry:** ☐Eye ☒ Skin Contact ☐ Skin Absorption ☒ Inhalation ☒ Ingestion

**Effects of Acute Exposure:** Irritation to skin and eyes. Inhalation of hot oil mist or vapours may irritate the upper respiratory tract.
**Effects of Chronic Exposure:** Repeated or prolonged exposure may cause dermatitis and/or oil acne. Long-term intensive exposure to oil mist may cause benign lung fibrosis. No specific toxicity data but extrapolation from similar materials indicates that this product has low oral toxicity.

| | | | |
|---|---|---|---|
| **Exposure Limits:** | 5 mg/$m^3$ (oil mist) | **Carcinogenicity:** | Not determined. |
| **Reproductive Toxicity:** | Not determined. | **Teratogenicity:** | Not determined. |
| **Irritancy of Product:** | Slight. | **Mutagenicity:** | Not determined. |

## SECTION 7 - PREVENTATIVE AND CORRECTIVE MEASURES

| | | |
|---|---|---|
| **Personal Protective Equipment:** | *Gloves:* | Oil/Chemical resistant. |
| | *Eye:* | Chemical safety glasses or full face shield. |
| | *Respiratory:* | NOISH respirator if mist levels are high. |
| | *Footwear:* | Oil/Chemical resistant. |
| | *Clothing:* | Oil/Chemical resistant if repeated exposure to skin and clothing occurs. |
| | *Other:* | |

| | |
|---|---|
| **Engineering Controls:** | Local exhaust at source of heated vapours. |
| **Leak and Spill Procedure:** | Contain spills with dikes or absorbent material. Eliminate fire hazards. Prevent from entering sewers or water courses. Vacuum liquid or transfer absorbed material into containers. Advise authorities. |
| **Waste Disposal:** | Follow local and governmental regulations. Not regulated as a hazardous waste. |
| **Storage Requirements** | Cool, dry location. Keep containers closed. |
| **Special Shipping Information:** | No special requirements. |

## SECTION 8 - FIRST AID MEASURES

| | |
|---|---|
| **Inhalation:** | Remove to fresh air or give artificial respiration. If breathing is difficult, give oxygen and seek medical attention. |
| **Ingestion:** | Do not induce vomiting, give two glasses of water and seek medical attention. |
| **Eye:** | Flush with water for 15 minutes. |
| **Skin:** | Wash contaminated area with soap and water. Clean contaminated clothing before wearing again. |
| **General Advice:** | High pressure injection under skin can be serious and requires urgent medical attention. |

## SECTION 9 - PREPARATION DATE OF MSDS

**MSDS Prepared by:** Coastal Packaging Inc. **Phone:** (506) 633-3732
**MSDS Date:** February 14, 2007
Revision 02

MATERIAL SAFETY
DATA SHEET

UNLEADED REGULAR GASOLINE

MSDS NO: 02002213

MANUFACTURER/SUPPLIER:
Amoco Oil Company
200 East Randolph Drive
Chicago, [illegible] 60601

EMERGENCY HEALTH INFORMATION: (800) 447-8735
EMERGENCY SPILL INFORMATION: (800) 424-9300
CHEMTREC, U.S.A.
OTHER PRODUCT SAFETY INFORMATION: (312) 856-3907

IMPORTANT COMPONENTS: Gasoline (CAS 8006-61-9) ACGIH TLV 300 ppm, STEL 500 ppm; OSHA PEL 300 ppm, STEL 500 ppm.
Benzene (CAS 71-43-2) ACGIH TLV 10 ppm; OSHA PEL 1 ppm (8-hr. TWA), STEL 5 ppm (15 min.).
*See Supplemental Information Section.

WARNING STATEMENT: Danger! Extremely flammable. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea. Harmful if swallowed and/or aspirated into lungs. Can produce skin irritation on prolonged or repeated contact. Use as motor fuel only. Long-term exposure to vapors has caused cancer in laboratory animals.

HMIS/NFPA CODES:(HEALTH;1)(FLAMMABILITY;3)(REACTIVITY;0), Chronic health hazard

APPEARANCE AND ODOR: Clear, bright liquid. Characteristic odor.

## HEALTH HAZARD INFORMATION

### EYE

EFFECT: High concentrations of vapor/mist may cause eye discomfort.

FIRST AID: Flush eyes with plenty of water. Get medical attention if irritation persists.

PROTECTION: None required; however, use of eye protection is good industrial practice.

### SKIN

EFFECT: Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

FIRST AID: Wash exposed skin with soap and water. Remove contaminated clothing, including shoes, and thoroughly clean and dry before reuse. Get medical attention if irritation develops.

PROTECTION: Avoid prolonged or repeated skin contact. Wear protective clothing and gloves if prolonged or repeated contact is likely.

### INHALATION

EFFECT: Vapour harmful. High vapor concentrations can cause headaches, dizziness, drowsiness and nausea. See Toxicology Section.

FIRST AID: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get medical attention.

PROTECTION: Use with adequate ventilation. Avoid breathing vapor and/or mist. If ventilation is inadequate, use NIOSH/MSHA certified respirator which will protect against organic vapor/mist.

## HEALTH HAZARD INFORMATION - CONTINUED

INGESTION

EFFECT: Low viscosity product. Harmful or fatal if aspirated into lungs.

FIRST AID: If swallowed, do NOT induce vomiting. Get immediate medical attention.

## FIRE AND EXPLOSION INFORMATION

FLASHPOINT: -45°F

FLAMMABLE LIMITS: UPPER: 7.6% LOWER: 1.3%

AUTOIGNITION TEMPERATURE: 495°F

EXTINGUISHING MEDIA: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, halogenated agents, foam, steam) or water fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Extremely flammable vapor/air mixtures form. Extinguishment of fire before source of vapor is shut off can create an explosive mixture in air.

PRECAUTIONS: Keep away from ignition sources (e.g., heat, sparks and open flames). Keep container closed. Use with adequate ventilation.

## REACTIVITY INFORMATION

DANGEROUS REACTIONS: Avoid chlorine, fluorine and other strong oxidizers.

HAZARDOUS DECOMPOSITION: Burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

STABILITY: Burning can be started easily.

## CHEMICAL AND PHYSICAL PROPERTIES

BOILING POINT: 80°F TO 430°F

SOLUBILITY IN WATER: Negligible, below 0.1%.

SPECIFIC GRAVITY (WATER = 1): 0.75

VAPOR PRESSURE: 7-15 lb RVP (ASTM D-323)

VAPOR DENSITY (AIR = 1): 3 TO 4

## STORAGE AND ENVIRONMENTAL PROTECTION

STORAGE REQUIREMENTS: Store in flammable liquids storage area. Keep container closed. Store away from heat, ignition sources, and open flame in accordance with applicable federal, state, or local regulations.

SPILLS AND LEAKS: Remove or shut off all sources of ignition. Use water spray to disperse vapors. Increase ventilation, if possible. Contain on an absorbent material (e.g., sand, sawdust, dirt, clay). Keep out of sewers and waterways.

WASTE DISPOSAL: Residues and spilled material are hazardous waste due to ignitability. Disposal must be in accordance with applicable federal, state, or local regulations. Enclosed-controlled incineration is recommended unless directed otherwise by applicable ordinances.

SPECIAL PRECAUTIONS: Keep out of sewers and waterways. Avoid strong oxidizers. Report spills to appropriate authorities. USE AS MOTOR FUEL ONLY.

## TOXICOLOGICAL INFORMATION

EYE: Primary eye irritation score 0.0/110.0 (rabbits).

SKIN: Primary dermal irritation score 1.1/8.0 (rabbits). Acute dermal LD50 greater than 5ml/kg (rabbits). Practically nontoxic for acute exposures by this route.

INHALATION: Acute LC50 20.7mg/l (rats).

INGESTION: Acute oral LD50 18.8ml/kg (rats). Practically nontoxic for acute exposures by this route.

Excessive exposure to vapors may produce headaches, dizziness, nausea, drowsiness, irritation of eyes, nose and throat and central nervous system depression.

In a long-term inhalation study of whole unleaded gasoline vapors, exposure-related kidney damage and kidney tumors were observed in male rats. Similar kidney effects were not seen in female rats or in mice. At the highest exposure level (2056 ppm), female mice had an increased incidence of liver tumors. Results from subsequent scientific studies suggest that the kidney damage and probably the kidney tumor response are unique to the male rat. The significance of the mouse liver tumor response in terms of human health is questionable.

Inhalation of whole unleaded gasoline vapors did not produce birth defects in laboratory animals.

Gasoline is a complex mixture of hydrocarbons and contains benzene (up to 4 volume %), toluene and xylene. Chronic exposure to high levels of benzene has been shown to cause cancer (leukemia) in humans and other adverse blood effects (anemia). Benzene is considered a human carcinogen by IARC, NTP and OSHA. Overexposure to xylene and toluene can cause irritation to the upper respiratory tract, headache and narcosis. Some liver damage and lung inflammation were seen in chronic studies on xylene in guinea pigs but not in rats.

Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product.

## REGULATORY INFORMATION

CERCLA REPORTABLE QUANTITY:
This product is exempt from the CERCLA reporting requirements under 40 CFR Part 302.4. However, if spilled into waters of the United States, it may be reportable under 33 CFR Part 153 if it produces a sheen.

DOT PROPER SHIPPING NAME: Gasoline, Flammable Liquid, UN1203.

OSHA HAZARD COMMUNICATION STANDARD: Flammable liquid. Irritant. Contains components listed by ACGIH. Contains components listed by OSHA. Contains a carcinogenic component. CNS effects.

RCRA STATUS:
This product is subject to the 40 CFR Part 268.30 land ban on the disposal of certain hazardous wastes because it contains the following substance(s):

| COMPONENT/CAS NUMBER |
|---|
| Ethylbenzene (100-41-4) |
| Toluene (108-88-3) |
| Xylene (1330-20-7) |

SARA STATUS:
This product is regulated under the following section(s) of SARA Title III, 42 USC 9601. Spills or releases of the product may be reportable as determined by the information given below:

SECTIONS 311 AND 312 OF SARA AND 40 CFR PART 370:
This product is defined as hazardous by OSHA under 29 CFR Part 1910.1200(d).

SECTION 313 OF SARA AND 40 CFR PART 372:
This product contains the following substances, which are on the Toxic Chemicals List in 40 CFR Part 372:

| COMPONENT/CAS NUMBER | WEIGHT PERCENT |
|---|---|
| Benzene (71-43-2) | 4 |
| Ethylbenzene (100-41-4) | 2 |
| Toluene (108-88-3) | 22 |
| Cyclohexane (110-82-7) | 5 |
| Xylene (1330-20-7) | 10 |
| MTBE (1634-04-4) | 11 |

TSCA STATUS: All of the components of this product are listed on the TSCA Inventory.

## SUPPLEMENTAL INFORMATION

Gasoline is a complex mixture of hydrocarbons. Those major components having occupational exposure limits are:

Butane (CAS 106-97-8) ACGIH TLV 800 ppm; OSHA PEL 800 ppm.

Cyclohexane (CAS 110-82-7) ACGIH TLV 300 ppm; OSHA PEL 300 ppm.

Ethylbenzene (CAS 100-41-4) ACGIH TLV 100 ppm, STEL 125 ppm; OSHA PEL 100 ppm, STEL 125 ppm.

## SUPPLEMENTAL INFORMATION - CONTINUED

n-Heptane (CAS 142-82-5) ACGIH TLV 400 ppm, STEL 500 ppm; OSHA PEL 400 ppm, STEL 500 ppm.

n-Hexane (CAS 110-54-3) ACGIH TLV 50 ppm; OSHA PEL 50 ppm.

Pentane (CAS 109-66-0) ACGIH TLV 600 ppm, STEL 750 ppm; OSHA PEL 600 ppm, STEL 750 ppm.

Toluene (CAS 108-88-3) ACGIH TLV 100 ppm, STEL 150 ppm; OSHA PEL 100 ppm, STEL 150 ppm.

Trimethyl benzene (CAS 25551-13-7) ACGIH TLV 25 ppm; OSHA PEL 25 ppm.

Xylene (CAS 1330-20-7) ACGIH TLV 100 ppm, STEL 150 ppm; OSHA PEL 100 ppm, STEL 150 ppm.

## ISSUE INFORMATION

BY:

G. I. Bresnick, Director
Product Stewardship & Toxicology

ISSUED: August 14, 1992
SUPERSEDES: June 09, 1989



PS0169

# Safety Data Sheet

## Section 1 – Identification

| | |
|---|---|
| **Product Identifier:** | Cordless Fuel Cell |
| **Manufacturer:** | Paslode<br>155 Harlen Avenue<br>Glenview, IL 60025 |
| **Information Telephone Number:** | 800-222-6990 |
| **Information Facsimile Number:** | 847-247-4993 |
| **Information Email Address:** | tech@paslode.com |
| **Emergency Telephone Number:** | Call CHEMTREC Day or Night<br>Within U.S. and Canada: 1-800-424-9300<br>Outside U.S. and Canada: +1 703-527-3887 (collect calls accepted) |
| **Recommended Use:** | Fuel for ITW-affiliated brand cordless tools (see below). |
| **Restrictions on Use:** | Use only with Paslode, Duo-Fast, Ramset, and Spit cordless tools. |

## Section 2 – Hazard(s) Identification

| | |
|---|---|
| **GHS Classification:** | Flammable aerosol, Category 1<br>Gases Under Pressure - Liquefied gas<br>Specific Target Organ Toxicity - Single Exposure Category 3<br>Simple Asphyxiant |
| **GHS Signal Word:** | Danger |
| **GHS Hazard Statements:** | Extremely flammable aerosol.<br>Contains gas under pressure; may explode if heated.<br>May cause drowsiness or dizziness.<br>May displace oxygen and cause rapid suffocation. |
| **GHS Hazard Symbols:** |  |
| **GHS Precautionary Statements**: | **Prevention**<br>Keep out of the reach of children.<br>Keep away from heat/sparks/open flames/hot surfaces - No smoking.<br>Do not spray on an open flame or other ignition sources. |

Pressurized container: Do not pierce or burn, even after use.
Avoid breathing fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.

**Response**

IF INHALED: Remove person to fresh air and keep in position comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.

**Storage**

Protect from sunlight.
Do not expose to temperatures exceeding 50ºC/122ºF.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

**Disposal**

Dispose of or recycle contents/container in accordance with local/regional/national/international regulations.

## Section 3 – Composition/Information on Ingredients (Fuel and Propellant)

| Hazardous Component | CAS-No. | Weight % |
|---|---|---|
| 1-butene (butylene) | 106-98-9 | 0 - 80 |
| propene (propylene) | 115-07-1 | 20 – 100 |

Concentration ranges are declared because SDS applies to a group of substantially similar mixtures.

## Section 4 – First-aid Measures

**Description of Necessary Measures:**

**Inhalation:** IF INHALED: Remove person to fresh air and keep comfortable for breathing. If not breathing, provide artificial respiration. Get immediate medical attention.

**Skin Contact:** IF ON SKIN: Frostbite may occur from contact with liquefied gas. In case of frostbite, wash with plenty of water; do not remove clothing. Get immediate medical attention. If frostbite not evident: Immediately remove/take off all contaminated clothing. Rinse skin with water/shower.

**Eye Contact:** IF IN EYES: Frostbite may occur from contact with liquefied gas. Rinse eyes cautiously with plenty of water for several minutes. Remove contact lenses if present and easy to do. Get immediate medical attention.

**Ingestion:** IF INGESTED: Frostbite may occur from contact with liquefied gas. Get immediate medical attention.

**Most Important Symptoms/Effects:**

**Immediate Effects:** Direct contact with skin, eyes or internal tissues may result in frostbite. May cause drowsiness or dizziness if expelled fuel displaces oxygen in an enclosed, poorly ventilated space. Rapid suffocation may result.

**Delayed Effects:** No significant effects are expected.

**Indication of Immediate Medical Attention & Special Treatment, if any:** Treat symptomatically and supportively.

## Section 5 – Fire Fighting Measures

**Suitable Extinguishing Media:** Water spray, foam, carbon dioxide or dry chemical.

**Unsuitable Extinguishing Media:** Do not use water jet as an extinguisher as this will spread fire.

**Specific Hazards:** Extremely flammable aerosol. Contains gas under pressure; may explode if heated.
Thermal decomposition (combustion) may produce carbon monoxide and carbon dioxide.

**Special Protective Equipment & Precautions for Fire-fighters:** Avoid contact or inhalation with material or combustion products. Use self-contained breathing apparatus in confined spaces. Eliminate all sources of ignition. Cool containers with water from unmanned hose holder at maximum distance. Isolate hazard area and deny entry to unauthorized persons.

## Section 6 – Accidental Release Measures

**Personal Precautions, Protective Equipment & Emergency Procedures:** Eliminate all sources of ignition and isolate hazard area. Ventilate area to maximum extent possible. Wear appropriate chemical resistant clothing and eye protection. See Sections 5, 7, 8, and 11 of this Safety Data Sheet for additional information.

**Methods & Materials for Containment & Cleanup:** Contain fire-fighting water to maximum extent possible and do not flush fire-fighting water to surface water or sanitary sewer system. Place waste material in appropriate container and dispose of per Section 13 of this Safety Data Sheet.

## Section 7 – Handling and Storage

**Precautions for Safe Handling:** Extremely flammable aerosol: Do not handle or use near extreme heat, sparks, open flames or hot surfaces. Pressurized container: Do not pierce or burn, even after use. Avoid breathing fume/gas/mist/vapors/spray. Wear appropriate personal protective equipment. Use only outdoors or in a well-ventilated area. For maximum number of tool cycles, use before date code on fuel cell.

**Conditions for Safe Storage, including Incompatibilities:** Do not expose to temperatures exceeding 50ºC/122ºF. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated area. See Section 10 of this Safety Data Sheet for incompatible materials.

## Section 8 – Exposure Controls/Personal Protection

**Exposure Limits:**

| Hazardous Component | OSHA PEL | ACGIH TLV |
|---|---|---|
| 1-butene (butylene) | Not Established | 250 (TWA) |
| propene (propylene) | Not Established | 500 (TWA) |

(PEL = Permissible Exposure Limit TLV = Threshold Limit Value TWA = Time-Weighted Average)

**Engineering Controls:** Ensure adequate air exchange when used with installation tools.

**Individual Protection Measures:**

**Eye/Face Protection**: Wear safety glasses with side shields when used with installation tools.

**Skin Protection:** Chemical resistant clothing not required during normal use with installation tools. Appropriate gloves and protective outerwear appropriate for the physical hazards typically encountered on construction sites is recommended.

**Respiratory Protection:** Not required during normal use with installation tools in well-ventilated areas or outdoors. Self-contained breathing apparatus required in confined spaces.

**Other Protection:** Provide first-aid supplies for significant contact injuries.

## Section 9 – Physical and Chemical Properties

| | | | |
|---|---|---|---|
| **Appearance:** | Colorless gas | **Upper/Lower Explosive Limits:** | ca. 2-10% in air |
| **Odor:** | Faintly olefinic | **Vapor Pressure:** | ca. 50-175 psig at 70ºF |
| **Odor Threshold:** | ca. 30 $mg/m^3$ | **Vapor Density (air = 1):** | ca. 1.5 |
| **pH:** | Not applicable | **Relative Density ($H_20$=1):** | ca. 0.6 - liquefied gas |
| **Melting Point/Freezing Point:** | ca. -300ºF | **Solubility:** | Slight |
| **Initial Boiling Point/Range:** | ca. -50ºF | **Partition Coefficient (Oct/$H_2O$):** | $K_{ow}$ = ca. 2 |
| **Flash Point:** | ca. -160ºF | **Auto-Ignition Temperature:** | ca. 800ºF |
| **Evaporation Rate:** | Not applicable | **Decomposition Temperature:** | Not available |
| **Flammability:** | Flammable gas | **Viscosity:** | Not applicable |

ca = circa (i.e., approximately)

## Section 10 – Stability and Reactivity

**Reactivity:** No significant reactivity known.

**Chemical Stability:** Stable under normal conditions of use.

**Possibility of Hazardous Reactions:** No significant possibility under normal conditions of use.

**Conditions to Avoid:** Extreme heat, sparks, open flames or hot surfaces.

**Incompatible Materials:** Strong acids, halogens, and oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide.

## Section 11 – Toxicological Information

**Acute and Chronic Toxicity:**

**Component Analysis - LD50/LC50:**

The components of this material have been reviewed in various sources and the following selected endpoints are published:

| | |
|---|---|
| 1-butene (CAS 106-98-9) | LC50 (rat) = 658 mg/L (4 hour) |
| propene (CAS 115-07-1) | LC50 (rat) = 658 mg/L (4 hour) |

**Immediate Effects:** Direct contact with skin, eyes or internal tissues may result in frostbite. May cause drowsiness or dizziness if expelled fuel displaces oxygen in an enclosed, poorly ventilated space. Rapid suffocation may result.

**Delayed Effects:** No significant effects are expected. Propene listed as IARC-3/ACGIH TLV-A4.

**Likely Routes of Exposure:**

| | |
|---|---|
| **Inhalation:** | May cause drowsiness or dizziness if expelled fuel displaces oxygen in an enclosed, poorly ventilated space. Rapid suffocation may result. |
| **Skin Contact:** | Contact with liquefied gas may cause frostbite. |
| **Eye Contact:** | Contact with liquefied gas may cause frostbite. |
| **Ingestion:** | Contact with liquefied gas may cause frostbite. |
| **Irritation/Corrosivity Data:** | No data available. |
| **Respiratory Sensitization:** | No data available. |
| **Dermal Sensitization:** | No data available. |
| **Germ Cell Mutagenicity:** | No data available. |
| **Reproductive Toxicity:** | No data available. |
| **STOT - Single Exposure:** | No known effects beyond simple asphyxiation. |
| **STOT - Repeated Exposure:** | No known effects. |
| (STOT = Specific Target Organ Toxicity) | |
| **Aspiration Hazard:** | No data available. |
| **Medical Conditions Aggravated by Exposure:** | None known. |

## Section 12 – Ecological Information

| | |
|---|---|
| **Ecotoxicity:** | No significant ecotoxic effects are expected. |
| **Persistence and degradability:** | Material is gaseous under atmospheric conditions and expected to dissipate primarily into the air when released into the environment. Material components are readily degradable based upon a variety of studies. |
| **Bioaccumulative Potential:** | Not expected to bioaccumulate. |
| **Mobility in Soil:** | Material is gaseous under atmospheric conditions and not expected to adsorb to or be absorbed by soils. |
| **Other Adverse Effects:** | None identified. |

## Section 13 – Disposal Considerations

Dispose of or recycle contents/container in accordance with local/regional/national/international regulations. See U.S. Resource Conservation and Recovery Act (RCRA) discussion in Section 16 of this Safety Data Sheet.

## Section 14 – Transport Information

**U.S. DOT INFORMATION (ground shipment)***

| | | | |
|---|---|---|---|
| **PROPER SHIPPING NAME:** | Aerosols, LTD QTY | | |
| **HAZARD CLASS:** | 2.1 | **PRODUCT RQ (lbs):** | none |
| **UN NUMBER:** | UN1950 | **LABEL:** | none |

**IMDG INFORMATION (vessel shipment)***

| | | | |
|---|---|---|---|
| **PROPER SHIPPING NAME:** | Aerosols, LTD QTY | | |
| **HAZARD CLASS:** | 2.1 | **PRODUCT RQ (lbs):** | none |
| **UN NUMBER:** | UN1950 | **LABEL:** | none |

**IATA INFORMATION (air shipment)***

| | | | |
|---|---|---|---|
| **PROPER SHIPPING NAME:** | Consumer Commodity | | |
| **HAZARD CLASS:** | 9 | **PRODUCT RQ (lbs):** | none |
| **UN NUMBER:** | ID8000 | **LABEL:** | Class 9 |

* Strictly observe all applicable special provisions, packaging requirements, quantity limitations, stowage requirements, and consumer commodity/limited quantity considerations.

## Section 15 – Regulatory Information

**TSCA STATUS:** All components are included in the TSCA Chemical Inventory.

**CERCLA REPORTABLE QUANTITY:** none

**SARA TITLE III:**

**SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES:** none

**SECTION 311/312 HAZARD CATEGORIES:**

| | |
|---|---|
| Acute Health | yes |
| Chronic Health | no |
| Fire | yes |
| Reactive | no |
| Sudden Release of Pressure | yes |

**SECTION 313 TOXIC CHEMICALS:** propene (propylene) CAS No. 115-07-1
20-100% by weight

**RCRA STATUS:** If discarded in its purchased form within the U.S., this product may be classified as a U.S. Environmental Protection Agency (EPA) RCRA D001 (ignitable)

hazardous waste. Even after use, the fuel cell remains pressurized by an extremely flammable propellant and may retain this hazardous waste characteristic. Waste generators must consider federal, state, and local hazardous waste regulations to determine a proper disposal method based on their status as a conditionally exempt, small quantity or large quantity generator per U.S. EPA or state-equivalent regulations. If discarded outside of the U.S. then classification, handling, and disposal of waste product must comply with all relevant international waste regulations.

**CANADIAN STATUS:** All components listed on Domestic Substances List (DSL).

**EUROPEAN UNION:** All components listed on European Inventory of Existing Commercial Chemical Substances (EINECS):

| Component | EINECS No. |
|---|---|
| 1-butene | 203-449-2 |
| propene | 204-062-1 |

**STATE REGULATORY INFORMATION:** No component of fuel gas or propellant is included on California Proposition 65 lists as a carcinogen or reproductive toxin.

## Section 16 – Other Information

**Hazardous Materials Identification System (HMIS) Ratings:**

Health: 1
Flammability: 4
Physical Hazards: 0
Personal Protection: **See Note below.**

**Hazard Ratings:** Severe to Minimal (4 to 0)

**Note:** Personal Protection rating to be supplied by user depending on conditions of use. Wear safety glasses with side shields when using this product with installation tools.

**Date Prepared:** August 1-2016
**Prepared By:** Paslode Product Safety Department

**Disclaimer of Expressed and Implied Warranties**

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of his use thereof.

**INDUSTRIAL FUEL COMPANY**
25 1ST AVE NE
HICKORY, NC 28601
PHONE: 828-324-7887

**MATERIAL SAFETY SHEET**

## A. PRODUCT IDENTIFICATION

PRODUCT: DIESEL FUEL

C.A.S. Number 68476346

TRADE NAMES / SYNONYMS:
No. @ Fuel Oil, Diesel Oil
Diesel Fuel #2, Home Heating Oil

D.O.T. PROPER SHIPPING NAME:
DIESEL FUEL
D.O.T. HAZARD CLASS: 3

CHEMICAL FAMILY:
Petroleum Hydrocarbon Distillate

D.O.T. IDENTIFICATION NO: NA-1993
PACKING GROUP III
PLACARDS REQUIRED: FLAMMABLE

## B. PRECAUTIONARY WARNING.

CAUTION: No smoking or open flames. Keep away from heat, sparks, flames or other sources of ignition.

HEALTH HAZARD: Excessive exposure may cause irritation to eyes, skin or respiratory system. Avoid liquid, mist or vapor contact. Harmful if swallowed. ASPIRATION HAZARD – Can enter lungs and cause damage.

## C. COMPOSITION AND EXPOSURE LIMITS.

| COMPONENT | C.A.S. NUMBER | CONCENTRATION RANGE %/WT | O.S.H.A. EXPOSURE LIMIT |
|---|---|---|---|
| Straight Run Middle Distillates | 64741-44-2 | 70 - 100% | 400 PPM TWA |
| Light Catalytic Cracked Distillate | 64741-59-9 | 0 - 30% | 400 PPM TWA |
| Naphthalene | 64741-41-9 | <3% | 10 PPM PEL<br>15 PPM STEL |

## D. EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

SKIN CONTACT: Wipe material from skin and remove contaminated shoes and clothing. Cleanse affected area(s) throughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

INHALATION (BREATHING): If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptons persist, seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION (SWALLOWING): ASPIRATION HAZARD -- Do not induce vomitting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious, place on side with head down. If possible, do not leave victim unattended. Seek medical attention.

SIGN AND SYMPTOMS OF EXPOSURE:

INHALATION: Central nervous system effects may include one or more of following: headache, dizziness loss of appetite, weakness and loss of coordination. SKIN: May include pain or a feeling of heat, discoloration, swelling and blistering.

CARCINOGENICITY: This product contains a mixture of petroleum hydrocarbons called middle distillates (which means they boil between approximately 350 degrees F and 700 degrees F). Because of this broad

description, many products are considered middle distillates yet they are produced by a variety of different petroleum refining processes. Toxicology data developed on some middle distillates found that they caused positive responses in some mutagenicity tests and caused skin cancer when repeatedly applied to mice over their lifetime. This product may contain some middle distillates found to cause those adverse effects.

COMMENTS: NOTE TO PHYSICIANS. Exposure to high concentrations of this material (e.g. in enclosed spaces or with deliberate abuse) may be associated with cardiac arrhythmias. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. Other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

## E. HEALTH HAZARDS/ROUTE OF ENTRY

EYE CONTACT: This material may cause mild eye irritation. Direct contact with liquid or exposure to vapors or mists may cause stinging, tearing and redness.

SKIN CONTACT: This material may cause mild skin irritation. Prolonged or repeated contact may cause redness, burning and drying and cracking of the skin. Contact may result in skin absorption but symptoms of toxicity are not anticipated by this route alone under normal conditions of use. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INHALATION (BREATHING): While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause flushing, blurred vision, nausea and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue). Exposure to high concentrations may cause loss of consciousness, convulsions, respiratory collapse and death. Respiratory symptoms associated with pre-existing lung disorders (e.g. asthma like conditions) may be aggravated by exposure to this material.

INGESTION (SWALLOWING): ASPIRATION HAZARD – This material can enter the lungs during swallowing or vomiting and cause lung inflammation and damage. Ingestion of excessive quantities of this material may cause irritation of the digestive tract and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue).

## F. PERSONAL PROTECTIVE EQUIPMENT

VENTILATION: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional ventilation or exhaust systems may be required.

RESPIRATORY PROTECTION: The use of respiratory protection is advised when concentrations exceed the established exposure limits. Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (NIOSH approved, if available) or supplied air equipement.

PROTECTIVE GLOVES: The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation.

EYE PROTECTION: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

OTHER PROTECTIVE EQUIPMENT: It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

## G. REACTIVITY

STABILITY: Stable under normal conditions of use.

INCOMPATIBILITY: Avoid strong oxidizing agents (peroxide, permanganate, dichromate, chlorine, etc.), strong acids, caustics and halogens.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS: Combustion may produce carbon monoxide, carbon dioxide and reactive hydrocarbons (aldehydes, aromatics, etc.)

CONDITIONS TO AVOID: Heat, sparks, open flame, static electricityor any other potential ignition sources should be avoided. Prevent vapor accumulation.

## H. FIRE PROTECTION/HAZARD

| FLASH POINT: METHOD | FLAMMABLE RANGE (APPROX) | AUTO IGNITION RANGE |
|---|---|---|
| 125 DEGREES F (CC) | LEL: .6% UEL: 7.5% | 500 DEGREES F |

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical or foam. Water fog may be effective in small incipient fires. Straight water streams may spread flammable liquid. Water streams should be used to cool exposed containers and surfaces. Prevent any runoff from entering sewers or waterways. Firefighting personnel should wear self contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85 degrees F.

NFPA Ratings: Health 0; Flammability 2; Reactivity 0

## I. PHYSICAL AND CHEMICAL DATA

BOILING POINT: 350 - 680 DEGREES F
MELTING POINT: Not Applicable
SOLUBILITY IN WATER: Insoluble
APPEARANCE & ODOR: Brownish blue green liquid; kerosene odor.

SPECIFIC GRAVITY: .8
VAPOR PRESSURE: 1MMHG@20DEGREES C
VAPOR DENSITY (AIR =1) >1
PERCENT VOLATILE: Not Applicable

## J. SPILL AND LEAK PROCEDURES

Report spills/releases to appropriate authorities in accordance with federal, state and local regulations. U.S. Coast Guard Regulations require immediate reporting of any spill that enters or threatens to enter any waterway.

Keep all sources if ignition, sparks, flames, open lights and or hot surfaces away from spilled material. Stay upwind and away from spill. Isolate area and restrict entry to emergency response personnel. Stop spill/release if it can be done safely. Wear appropriate protective equipment as conditions warrant. Prevent spilled material from entering sewers, storm drains and any waterway. Use sand, soil or other inert material to dike and contain liquid. Liquid may be recovered by pumping up. Remaining material, i.e. sand, contaminated dirt, sorbent material must be picked up or excavated and disposed of in accordance with federal, state and local hazardous waste management regulations.

## K. DISCLAIMER

The information and recommendations contained in this publication have been compiled from sources believed to be reliable and to represent the best current opinion on the subject at the time of publication. Since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the recommendations will be adequate for all individuals or situations. Each user of the product described herein should determine the suitability of the described product for his particular purpose and should comply with all federal and state rules and regulations concerning the described product.

# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT**

**Product Name:** **MOBIL SUPER 10W-30**
**Product Description:** Base Oil and Additives
**Product Code:** 201510301015
**Intended Use:** Engine oil

**COMPANY IDENTIFICATION**

**Supplier:** **EXXON MOBIL CORPORATION**
22777 Springwoods Village Parkway
Spring, TX 77389 USA

| | |
|---|---|
| **24 Hour Health Emergency** | 609-737-4411 |
| **Transportation Emergency Phone** | 800-424-9300 or 703-527-3887 CHEMTREC |
| **Product Technical Information** | 800-662-4525 |
| **MSDS Internet Address** | www.exxon.com, www.mobil.com |

## SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1910.1200.

**PHYSICAL / CHEMICAL HAZARDS**

No significant hazards.

**HEALTH HAZARDS**

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

**ENVIRONMENTAL HAZARDS**

No significant hazards.

| | | | | | | |
|---|---|---|---|---|---|---|
| **NFPA Hazard ID:** | Health: | 0 | Flammability: | 1 | Reactivity: | 0 |
| **HMIS Hazard ID:** | Health: | 0 | Flammability: | 1 | Reactivity: | 0 |

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary

from person to person.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

| Name | CAS# | Concentration* | GHS Hazard Codes |
|---|---|---|---|
| BENZENAMINE, AR-NONYL-N-(NONYL PHENYL)- | 36878-20-3 | 1 - < 5% | H413 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | 64742-54-7 | 5 - < 10% | H304 |
| ZINC BIS(O,O-DIISOOCTYL) BIS(DITHIOPHOSPHATE) | 28629-66-5 | 0.1 - < 1% | H315, H318, H401, H411 |

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

## SECTION 4 FIRST AID MEASURES

### INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

## SECTION 5 FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

## FIRE FIGHTING

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulfur oxides

## FLAMMABILITY PROPERTIES

**Flash Point [Method]:** 226°C (439°F) [ASTM D-92]
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0
**Autoignition Temperature:** N/D

# SECTION 6 ACCIDENTAL RELEASE MEASURES

## NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

## PROTECTIVE MEASURES

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

## SPILL MANAGEMENT

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

**ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

Avoid contact with used product. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

**STORAGE**

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMIT VALUES**

**Exposure limits/standards (Note: Exposure limits are not additive)**

| Substance Name | Form | Limit / Standard | | | NOTE | Source |
|---|---|---|---|---|---|---|
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | Mist. | TWA | 5 mg/m3 | | N/A | OSHA Z1 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | Mist. | TWA | 5 mg/m3 | | N/A | ACGIH |

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

## PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

## GENERAL INFORMATION

**Physical State:** Liquid
**Color:** Amber
**Odor:** Characteristic
**Odor Threshold:** N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

**Relative Density (at 15 °C):** 0.861 [ASTM D1298]
**Flammability (Solid, Gas):** N/A
**Flash Point [Method]:** 226°C (439°F) [ASTM D-92]
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0
**Autoignition Temperature:** N/D
**Boiling Point / Range:** > 316°C (600°F)
**Decomposition Temperature:** N/D
**Vapor Density (Air = 1):** N/D
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C
**Evaporation Rate (n-butyl acetate = 1):** N/D
**pH:** N/A
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5
**Solubility in Water:** Negligible
**Viscosity:** 64 cSt (64 mm2/sec) at 40 °C | 10.3 cSt (10.3 mm2/sec) at 100°C [ASTM D 445]
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**

**Freezing Point:** N/D
**Melting Point:** N/A
**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

## SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**INFORMATION ON TOXICOLOGICAL EFFECTS**

| Hazard Class | Conclusion / Remarks |
|---|---|
| **Inhalation** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| Irritation: No end point data for material. | Negligible hazard at ambient/normal handling temperatures. |
| **Ingestion** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| **Skin** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |

| | |
|---|---|
| Skin Corrosion/Irritation: No end point data for material. | Negligible irritation to skin at ambient temperatures. Based on assessment of the components. |
| **Eye** | |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components. |
| **Sensitization** | |
| Respiratory Sensitization: No end point data for material. | Not expected to be a respiratory sensitizer. |
| Skin Sensitization: No end point data for material. | Not expected to be a skin sensitizer. Based on assessment of the components. |
| **Aspiration:** Data available. | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. |
| **Germ Cell Mutagenicity:** No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components. |
| **Carcinogenicity:** No end point data for material. | Not expected to cause cancer. Based on assessment of the components. |
| **Reproductive Toxicity:** No end point data for material. | Not expected to be a reproductive toxicant. Based on assessment of the components. |
| **Lactation:** No end point data for material. | Not expected to cause harm to breast-fed children. |
| **Specific Target Organ Toxicity (STOT)** | |
| Single Exposure: No end point data for material. | Not expected to cause organ damage from a single exposure. |
| Repeated Exposure: No end point data for material. | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components. |

**OTHER INFORMATION**

**For the product itself:**

Diesel engine oils: Not carcinogenic in animals tests. Used and unused diesel engine oils did not produce any carcinogenic effects in chronic mouse skin painting studies.

Oils that are used in gasoline engines may become hazardous and display the following properties: Carcinogenic in animal tests. Caused mutations in vitro. Possible allergen and photoallergen. Contains polycyclic aromatic compounds (PAC) from combustion products of gasoline and/or thermal degradation products.

**Contains:**

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

**The following ingredients are cited on the lists below:** None.

--REGULATORY LISTS SEARCHED--

| | | |
|---|---|---|
| 1 = NTP CARC | 3 = IARC 1 | 5 = IARC 2B |
| 2 = NTP SUS | 4 = IARC 2A | 6 = OSHA CARC |

## SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

**ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

**MOBILITY**

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY**

**Biodegradation:**

Base oil component -- Expected to be inherently biodegradable

**BIOACCUMULATION POTENTIAL**

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

**REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## SECTION 14 TRANSPORT INFORMATION

**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

## SECTION 15 REGULATORY INFORMATION

**OSHA HAZARD COMMUNICATION STANDARD:** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA (311/312) REPORTABLE GHS HAZARD CLASSES:** None.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

**The following ingredients are cited on the lists below:**

| Chemical Name | CAS Number | List Citations |
|---|---|---|
| 2-PENTANOL, 4-METHYL-, HYDROGEN PHOSPHORODITHIOATE, ZINC SALT | 2215-35-2 | 15 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | 64742-54-7 | 17, 18, 19 |
| ZINC BIS(O,O-DIISOOCTYL) BIS(DITHIOPHOSPHATE) | 28629-66-5 | 15 |

--REGULATORY LISTS SEARCHED--

| | | | |
|---|---|---|---|
| 1 = ACGIH ALL | 6 = TSCA 5a2 | 11 = CA P65 REPRO | 16 = MN RTK |
| 2 = ACGIH A1 | 7 = TSCA 5e | 12 = CA RTK | 17 = NJ RTK |

| | | | |
|---|---|---|---|
| 3 = ACGIH A2 | 8 = TSCA 6 | 13 = IL RTK | 18 = PA RTK |
| 4 = OSHA Z | 9 = TSCA 12b | 14 = LA RTK | 19 = RI RTK |
| 5 = TSCA 4 | 10 = CA P65 CARC | 15 = MI 293 | |

Code key: CARC=Carcinogen; REPRO=Reproductive

## SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**
H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1
H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2
H413: May cause long lasting harmful effects to aquatic life; Chronic Env Tox, Cat 4

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**
Composition: Component Table information was modified.
Section 01: Company Contact Methods information was modified.
Section 01: Company Mailing Address information was modified.
Section 01: Product Code information was modified.
Section 05: Hazardous Combustion Products information was modified.
Section 07: Handling and Storage - Handling information was modified.
Section 07: Handling and Storage - Storage Phrases information was modified.
Section 08: Exposure Limits Table information was modified.
Section 09: Flash Point C(F) information was modified.
Section 09: Pour Point C(F) information was deleted.
Section 09: Relative Density information was modified.
Section 09: Vapor Pressure information was added.
Section 09: Viscosity information was modified.
Section 11: Chronic Tox - Product information was modified.
Section 12: information was modified.
Section 13: Disposal Considerations - Disposal Recommendations information was modified.
Section 14: Marine Pollutant information was modified.
Section 15: List Citations Table information was modified.
Section 15: National Chemical Inventory Listing information was modified.
Section 15: SARA (311/312) REPORTABLE GHS HAZARD CLASSES information was added.
Section 15: SARA (311/312) REPORTABLE HAZARD CATEGORIES information was deleted.
Section 16: HCode Key information was modified.
Section 16: MSN, MAT ID information was modified.

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Internal Use Only

MHC: 0B, 0B, 0, 0, 0, 0 PPEC: A

DGN: 7108691XUS (1027821)

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# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT**

**Product Name:** **MOBIL SUPER 10W-40**
**Product Description:** Base Oil and Additives
**Product Code:** 201510301020, 97D092
**Intended Use:** Engine oil

**COMPANY IDENTIFICATION**

**Supplier:** **EXXON MOBIL CORPORATION**
22777 Springwoods Village Parkway
Spring, TX 77389 USA

| | |
|---|---|
| **24 Hour Health Emergency** | 609-737-4411 |
| **Transportation Emergency Phone** | 800-424-9300 or 703-527-3887 CHEMTREC |
| **Product Technical Information** | 800-662-4525 |
| **MSDS Internet Address** | www.exxon.com, www.mobil.com |

## SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

**Other hazard information:**

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1910.1200.

**PHYSICAL / CHEMICAL HAZARDS**

No significant hazards.

**HEALTH HAZARDS**

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

**ENVIRONMENTAL HAZARDS**

No significant hazards.

| | | | | | | |
|---|---|---|---|---|---|---|
| **NFPA Hazard ID:** | Health: | 0 | Flammability: | 1 | Reactivity: | 0 |
| **HMIS Hazard ID:** | Health: | 0 | Flammability: | 1 | Reactivity: | 0 |

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary

from person to person.

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

**Hazardous Substance(s) or Complex Substance(s) required for disclosure**

| Name | CAS# | Concentration* | GHS Hazard Codes |
|---|---|---|---|
| BENZENAMINE, AR-NONYL-N-(NONYL PHENYL)- | 36878-20-3 | 1 - < 5% | H413 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | 64742-54-7 | 10 - < 20% | H304 |
| SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE | 64742-65-0 | 5 - < 10% | H304 |
| ZINC BIS(O,O-DIISOOCTYL) BIS(DITHIOPHOSPHATE) | 28629-66-5 | 0.1 - < 1% | H315, H318, H401, H411 |

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

## SECTION 4 FIRST AID MEASURES

### INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

## SECTION 5 FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**Inappropriate Extinguishing Media:** Straight Streams of Water

**FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Aldehydes, Incomplete combustion products, Oxides of carbon, Smoke, Fume, Sulfur oxides

**FLAMMABILITY PROPERTIES**

**Flash Point [Method]:** 220°C (428°F) [ASTM D-92]
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0
**Autoignition Temperature:** N/D

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

**PROTECTIVE MEASURES**

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

**SPILL MANAGEMENT**

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be

consulted. Note: Local regulations may prescribe or limit action to be taken.

**ENVIRONMENTAL PRECAUTIONS**

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7 HANDLING AND STORAGE

**HANDLING**

Avoid contact with used product. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

**STORAGE**

The type of container used to store the material may affect static accumulation and dissipation. Do not store in open or unlabelled containers.

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**EXPOSURE LIMIT VALUES**

**Exposure limits/standards (Note: Exposure limits are not additive)**

| Substance Name | Form | Limit / Standard | | | NOTE | Source |
|---|---|---|---|---|---|---|
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | Mist. | TWA | 5 mg/m3 | | N/A | OSHA Z1 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC DISTILLATE | Inhalable fraction. | TWA | 5 mg/m3 | | N/A | ACGIH |
| SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE | Mist. | TWA | 5 mg/m3 | | N/A | OSHA Z1 |
| SOLVENT DEWAXED HEAVY PARAFFINIC DISTILLATE | Inhalable fraction. | TWA | 5 mg/m3 | | N/A | ACGIH |

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur the following are recommended: 5 mg/m³ - ACGIH TLV (inhalable fraction), 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

**ENGINEERING CONTROLS**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

**PERSONAL PROTECTION**

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

**ENVIRONMENTAL CONTROLS**

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.**

**GENERAL INFORMATION**

**Physical State:** Liquid
**Color:** Amber
**Odor:** Characteristic
**Odor Threshold:** N/D

**IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION**

**Relative Density (at 15 °C):** 0.867 [ASTM D4052]
**Flammability (Solid, Gas):** N/A
**Flash Point [Method]:** 220°C (428°F) [ASTM D-92]
**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0
**Autoignition Temperature:** N/D
**Boiling Point / Range:** > 316°C (600°F)
**Decomposition Temperature:** N/D
**Vapor Density (Air = 1):** N/D
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C
**Evaporation Rate (n-butyl acetate = 1):** N/D
**pH:** N/A
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5
**Solubility in Water:** Negligible
**Viscosity:** 113 cSt (113 mm2/sec) at 40 °C | 15.6 cSt (15.6 mm2/sec) at 100°C [ASTM D 445]
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**

**Freezing Point:** N/D
**Melting Point:** N/A
**Pour Point:** -27°C (-17°F) [ASTM D97]
**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

## SECTION 10 STABILITY AND REACTIVITY

**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

**INFORMATION ON TOXICOLOGICAL EFFECTS**

| Hazard Class | Conclusion / Remarks |
|---|---|
| **Inhalation** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| Irritation: No end point data for material. | Negligible hazard at ambient/normal handling temperatures. |

| | |
|---|---|
| **Ingestion** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| **Skin** | |
| Acute Toxicity: No end point data for material. | Minimally Toxic. Based on assessment of the components. |
| Skin Corrosion/Irritation: No end point data for material. | Negligible irritation to skin at ambient temperatures. Based on assessment of the components. |
| **Eye** | |
| Serious Eye Damage/Irritation: No end point data for material. | May cause mild, short-lasting discomfort to eyes. Based on assessment of the components. |
| **Sensitization** | |
| Respiratory Sensitization: No end point data for material. | Not expected to be a respiratory sensitizer. |
| Skin Sensitization: No end point data for material. | Not expected to be a skin sensitizer. Based on assessment of the components. |
| **Aspiration:** Data available. | Not expected to be an aspiration hazard. Based on physico-chemical properties of the material. |
| **Germ Cell Mutagenicity:** No end point data for material. | Not expected to be a germ cell mutagen. Based on assessment of the components. |
| **Carcinogenicity:** No end point data for material. | Not expected to cause cancer. Based on assessment of the components. |
| **Reproductive Toxicity:** No end point data for material. | Not expected to be a reproductive toxicant. Based on assessment of the components. |
| **Lactation:** No end point data for material. | Not expected to cause harm to breast-fed children. |
| **Specific Target Organ Toxicity (STOT)** | |
| Single Exposure: No end point data for material. | Not expected to cause organ damage from a single exposure. |
| Repeated Exposure: No end point data for material. | Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components. |

**OTHER INFORMATION**

**For the product itself:**

Diesel engine oils: Not carcinogenic in animals tests. Used and unused diesel engine oils did not produce any carcinogenic effects in chronic mouse skin painting studies.

Oils that are used in gasoline engines may become hazardous and display the following properties: Carcinogenic in animal tests. Caused mutations in vitro. Possible allergen and photoallergen. Contains polycyclic aromatic compounds (PAC) from combustion products of gasoline and/or thermal degradation products.

**Contains:**

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

**The following ingredients are cited on the lists below:** None.

--REGULATORY LISTS SEARCHED--

| | | |
|---|---|---|
| 1 = NTP CARC | 3 = IARC 1 | 5 = IARC 2B |
| 2 = NTP SUS | 4 = IARC 2A | 6 = OSHA CARC |

## SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

**ECOTOXICITY**

Material -- Not expected to be harmful to aquatic organisms.

**MOBILITY**

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

**PERSISTENCE AND DEGRADABILITY**

**Biodegradation:**

Base oil component -- Expected to be inherently biodegradable

**BIOACCUMULATION POTENTIAL**

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

**REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be

taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

## SECTION 14 TRANSPORT INFORMATION

**LAND (DOT):** Not Regulated for Land Transport

**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

## SECTION 15 REGULATORY INFORMATION

**OSHA HAZARD COMMUNICATION STANDARD:** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, ISHL, KECI, PICCS, TCSI, TSCA

**SARA 302:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

**SARA (311/312) REPORTABLE GHS HAZARD CLASSES:** None.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

**The following ingredients are cited on the lists below:**

| Chemical Name | CAS Number | List Citations |
|---|---|---|
| 2-PENTANOL, 4-METHYL-, HYDROGEN PHOSPHORODITHIOATE, ZINC SALT | 2215-35-2 | 15 |
| SEVERELY HYDROTREATED HEAVY PARAFFINIC | 64742-54-7 | 17, 18, 19 |

| | | |
|---|---|---|
| DISTILLATE | | |
| ZINC BIS(O,O-DIISOOCTYL) BIS(DITHIOPHOSPHATE) | 28629-66-5 | 15 |

--REGULATORY LISTS SEARCHED--

| | | | |
|---|---|---|---|
| 1 = ACGIH ALL | 6 = TSCA 5a2 | 11 = CA P65 REPRO | 16 = MN RTK |
| 2 = ACGIH A1 | 7 = TSCA 5e | 12 = CA RTK | 17 = NJ RTK |
| 3 = ACGIH A2 | 8 = TSCA 6 | 13 = IL RTK | 18 = PA RTK |
| 4 = OSHA Z | 9 = TSCA 12b | 14 = LA RTK | 19 = RI RTK |
| 5 = TSCA 4 | 10 = CA P65 CARC | 15 = MI 293 | |

Code key: CARC=Carcinogen; REPRO=Reproductive

## SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**
H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1
H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2
H413: May cause long lasting harmful effects to aquatic life; Chronic Env Tox, Cat 4

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**
Composition: Component Table information was modified.
Section 08: Exposure Limits Table information was modified.
Section 09: Pour Point C(F) information was modified.
Section 09: Relative Density information was modified.
Section 09: Viscosity information was modified.
Section 13: Disposal Considerations - Disposal Recommendations information was modified.
Section 15: National Chemical Inventory Listing information was modified.

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Internal Use Only

MHC: 0B, 0B, 0, 0, 0, 0 PPEC: A

DGN: 2004946XUS (1027833)

# SAFETY DATA SHEET

**SDS ID NO.:** 0127MAR019
**Revision Date** 03/19/2018

## 1. IDENTIFICATION

**Product Name:** Marathon Petroleum Gasoline - All Grades

**Synonym:** Gasoline; Regular Unleaded Gasoline; Conventional Regular Unleaded Gasoline; Mid Grade Unleaded Gasoline; Conventional Mid Grade Unleaded Gasoline; Premium Unleaded Gasoline; Conventional Premium Unleaded Gasoline; Sub-Octane Gasoline; Regular RBOB; Super RBOB; Premium RBOB; RBOB; Reformulated Blend Stock For Oxygenated Blending; 84 Octane Gasoline; CBOB; Premium CBOB; Conventional Blend Stock for Oxygenate Blending; Recreational Gasoline; Recreational Gasoline; Recreational Unleaded Gasoline; 89 Recreational Gasoline; Brand 89 Recreational Gasoline; 7.0 Max RVP 89 Recreational Gasoline; BR 7.0 Max RVP 89 Recreational Gasoline; 90 Recreational Gasoline; 90 Marina Gasoline; Brand EX 90 UL Recrtnl Gasoline; Brand 91 Recreational Gasoline; 91 Recreational Gasoline; 91 Marina Gasoline; 90 Octane Midgrade Gasoline with No Ethanol; 7.8# New York CBOB Gasoline Blend Grade; Non-Summer New York CBOB Gasoline Blend Grade 0125MAR019; 0126MAR019; 0134MAR019; 0313MAR019; 0314MAR019

**Product Code:** 0127MAR019
**Chemical Family:** Complex Hydrocarbon Substance

**Recommended Use:** Fuel.
**Restrictions on Use:** All others.

**Manufacturer, Importer, or Responsible Party Name and Address:**

**MARATHON PETROLEUM COMPANY LP**
**539 South Main Street**
**Findlay, OH 45840**

**SDS information (M-F, 8-5 EST):** 1-419-421-3070

**Emergency Telephone (24/7):** CHEMTREC: 1-800-424-9300 CCN#: 13740

## 2. HAZARD IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 1 |
| Skin corrosion/irritation | Category 2 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1A |
| Reproductive toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Aspiration toxicity | Category 1 |

| | |
|---|---|
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

**Hazards Not Otherwise Classified (HNOC)**
Static accumulating flammable liquid

**Label elements**

**EMERGENCY OVERVIEW**

**Danger**

EXTREMELY FLAMMABLE LIQUID AND VAPOR
May accumulate electrostatic charge and ignite or explode
May be fatal if swallowed and enters airways
Causes skin irritation
May cause respiratory irritation
May cause drowsiness or dizziness
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Causes damage to organs (blood, blood-forming organs, immune system) through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects

**Appearance** Clear yellow liquid **Physical State** Liquid **Odor** Hydrocarbon

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools.
Take action to prevent static discharges
Do not eat, drink or smoke when using this product
Do not breathe mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Wash hands and any possibly exposed skin thoroughly after handling
Avoid release to the environment

**Precautionary Statements - Response**
IF exposed, concerned or you feel unwell: Get medical attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use water spray, fog or regular foam for extinction
Collect spillage

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container at an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Gasoline is a complex combination of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having molecular chains ranging in length from four to ten carbons. May contain small amounts of dye and other additives (>0.02%) which are not considered hazardous at the concentrations used.

### Composition Information:

| Name | CAS Number | % Concentration |
|---|---|---|
| Gasoline | 86290-81-5 | 100 |
| Heptane (mixed isomers) | 142-82-5 | 2.5-26 |
| Butane (mixed isomers) | 106-97-8 | 0.5-19 |
| Pentane (mixed isomers) | 78-78-4 | 6.5-19 |
| Hexane Isomers (other than n-Hexane) | 107-83-5 | 2-12 |
| Toluene | 108-88-3 | 3-9.5 |
| Xylene (mixed isomers) | 1330-20-7 | 3.5-9.5 |
| Benzene | 71-43-2 | 0.1-4.9 |
| n-Hexane | 110-54-3 | 0.1-4.5 |
| Cumene | 98-82-8 | 0-4 |
| 1,2,4 Trimethylbenzene | 95-63-6 | 1-4 |
| Ethylbenzene | 100-41-4 | 0.5-2.5 |
| Cyclohexane | 110-82-7 | 0-1.5 |
| Octane | 111-65-9 | 0-1.5 |
| 1,2,3-Trimethylbenzene | 526-73-8 | 0-1 |
| Naphthalene | 91-20-3 | 0.1-0.5 |

Benzene concentration is percent by volume. All other concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

## 4. FIRST AID MEASURES

**First Aid Measures**

**General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Inhalation:** Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. If symptoms occur get medical attention.

**Skin Contact:** Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. May be absorbed through the skin in harmful amounts. Get medical attention if irritation persists. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

**Eye Contact:** Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while

flushing. Get medical attention if irritation persists.

**Ingestion:** Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Most important signs and symptoms, both short-term and delayed with overexposure**

**Adverse Effects:** Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. May cause nausea, vomiting, diarrhea, and signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Prolonged or repeated exposure may cause adverse effects on blood, blood-forming organs, and immune system. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

**Indication of any immediate medical attention and special treatment needed**

**Notes To Physician:** INHALATION: This material (or a component) sensitizes the myocardium to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Unsuitable extinguishing media**
Do not use straight water streams to avoid spreading fire.

**Specific hazards arising from the chemical**
This product has been determined to be an extremely flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information, see NFPA 30 or the Emergency Response Guidebook 128.

**Hazardous combustion products**
Smoke, carbon monoxide, and other products of incomplete combustion.

**Explosion data**
**Sensitivity to Mechanical Impact** No.
**Sensitivity to Static Discharge** Yes.

**Special protective equipment and precautions for firefighters**

Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Additional firefighting tactics**
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after the fire is out. Do not direct water at source of leak or safety devices; icing may occur. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles: if this is impossible, withdraw from area and let fire burn.

EVACUATION: Consider initial downwind evacuation for at least 1000 feet. If tank, rail car or tank truck is involved in a fire, ISOLATE for 5280 feet (1 mile) in all directions; also, consider initial evacuation of 5280 feet (1 mile) in all directions.

| **NFPA** | Health 1 | Flammability 3 | Instability 0 | Special Hazard - |
|---|---|---|---|---|

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources.

**Protective equipment:** Use personal protection measures as recommended in Section 8.

**Emergency procedures:** Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

**Environmental precautions:** Avoid release to the environment. Avoid subsoil penetration. Ethanol in gasoline phase seperates in contact with water. Monitor downstream for dissolved ethanol or other appropriate indicators.

**Methods and materials for containment:** Contain liquid with sand or soil. Prevent spilled material from entering storm drains, sewers, and open waterways.

**Methods and materials for cleaning up:** Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and bonded. Use only non-sparking tools.

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:** NEVER SIPHON THIS PRODUCT BY MOUTH. Use appropriate grounding and bonding practices. Static accumulating flammable liquid. Bonding and grounding may be insufficient to eliminate the hazard from static electricity. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. Vapors may travel along the ground or be moved by ventilation. Flashback may occur along vapor trails. No smoking. Use only non-sparking tools. Avoid contact with skin, eyes and clothing. Avoid breathing fumes, gas, or vapors. Use only with adequate ventilation. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Hydrocarbons are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, pumping at high flow rates or loading and transfer operations. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic chemical vapors or mists from process equipment operating under elevated temperature and pressure, or sudden ingress of air into vacuum equipment may result in ignition of vapors or mists without the

presence of obvious ignition sources. Nozzle spouts must be kept in contact with the containers or tank during the entire filling operation.

Portable containers should never be filled while in or on a motor vehicle or marine craft. Containers should be placed on the ground. Static electric discharge can ignite fuel vapors when filling non-grounded containers or vehicles on trailers. The nozzle spout must be kept in contact with the container before and during the entire filling operation. Use only approved containers.

A buildup of static electricity can occur upon re-entry into a vehicle during fueling especially in cold or dry climate conditions. The charge is generated by the action of dissimilar fabrics (i.e., clothing and upholstery) rubbing across each other as a person enters/exits the vehicle. A flash fire can result from this discharge if sufficient flammable vapors are present. Therefore, do not get back in your vehicle while refueling.

Cellular phones and other electronic devices may have the potential to emit electrical charges (sparks). Sparks in potentially explosive atmospheres (including fueling areas such as gas stations) could cause an explosion if sufficient flammable vapors are present. Therefore, turn off cellular phones and other electronic devices when working in potentially explosive atmospheres or keep devices inside your vehicle during refueling.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

**Storage Conditions:** Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Do not store near an open flame, heat or other sources of ignition.

**Incompatible Materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | ACGIH TLV | OSHA PELS: | OSHA - Vacated PELs | NIOSH IDLH |
|---|---|---|---|---|
| Gasoline<br>86290-81-5 | 300 ppm TWA<br>500 ppm STEL | - | 300 ppm TWA<br>900 mg/m³ TWA<br>500 ppm STEL<br>1500 mg/m³ STEL | - |
| Heptane (mixed isomers)<br>142-82-5 | 400 ppm TWA<br>500 ppm STEL | TWA: 500 ppm<br>TWA: 2000 mg/m³ | 400 ppm TWA<br>1600 mg/m³ TWA<br>500 ppm STEL<br>2000 mg/m³ STEL | 750 ppm |
| Butane (mixed isomers)<br>106-97-8 | 1000 ppm STEL | - | 800 ppm TWA<br>1900 mg/m³ TWA | - |
| Pentane (mixed isomers)<br>78-78-4 | 1000 ppm TWA | - | - | - |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | 500 ppm TWA<br>1000 ppm STEL | - | 500 ppm TWA<br>1800 mg/m³ TWA<br>1000 ppm STEL<br>3600 mg/m³ STEL | - |
| Toluene<br>108-88-3 | 20 ppm TWA | TWA: 200 ppm<br>Ceiling: 300 ppm | 100 ppm TWA<br>375 mg/m³ TWA<br>150 ppm STEL<br>560 mg/m³ STEL | 500 ppm |
| Xylene (mixed isomers)<br>1330-20-7 | 100 ppm TWA<br>150 ppm STEL | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>150 ppm STEL<br>655 mg/m³ STEL | 900 ppm |
| Benzene | 0.5 ppm TWA | TWA: 10 ppm (applies to | 25 ppm Ceiling | 500 ppm |

| | | | | |
|---|---|---|---|---|
| 71-43-2 | 2.5 ppm STEL<br>Skin - potential significant contribution to overall exposure by the cutaneous route | industry segments exempt from the benzene standard)<br>TWA: 1 ppm<br>STEL: 5 ppm<br>(see 29 CFR 1910.1028) | 1 ppm TWA<br>5 ppm STEL | |
| n-Hexane<br>110-54-3 | 50 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 500 ppm<br>TWA: 1800 mg/m³ | 50 ppm TWA<br>180 mg/m³ TWA | 1100 ppm |
| Cumene<br>98-82-8 | 50 ppm TWA | TWA: 50 ppm<br>TWA: 245 mg/m³<br>Skin | 50 ppm TWA<br>245 mg/m³ TWA<br>Limit applies to skin | 900 ppm |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 25 ppm TWA | - | 25 ppm TWA<br>125 mg/m³ TWA | - |
| Ethylbenzene<br>100-41-4 | 20 ppm TWA | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>125 ppm STEL<br>545 mg/m³ STEL | 800 ppm |
| Cyclohexane<br>110-82-7 | 100 ppm TWA | TWA: 300 ppm<br>TWA: 1050 mg/m³ | 300 ppm TWA<br>1050 mg/m³ TWA | 1300 ppm |
| Octane<br>111-65-9 | 300 ppm TWA | TWA: 500 ppm<br>TWA: 2350 mg/m³ | 300 ppm TWA<br>1450 mg/m³ TWA<br>375 ppm STEL<br>1800 mg/m³ STEL | 1000 ppm |
| 1,2,3-Trimethylbenzene<br>526-73-8 | 25 ppm TWA | - | 25 ppm TWA<br>125 mg/m³ TWA | - |
| Naphthalene<br>91-20-3 | 10 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm<br>TWA: 50 mg/m³ | 10 ppm TWA<br>50 mg/m³ TWA<br>15 ppm STEL<br>75 mg/m³ STEL | 250 ppm |

**Notes:** The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

**Engineering measures:** Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

**Personal protective equipment**

**Eye protection:** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection:** Use nitrile rubber, Viton® or PVA gloves for repeated or prolonged skin exposure. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

**Respiratory protection:** Use a NIOSH approved organic vapor chemical cartridge or supplied air respirators when there is the potential for airborne exposures to exceed permissible exposure limits or if excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical State** Liquid
**Appearance** Clear yellow liquid

| | |
|---|---|
| **Color** | Yellow |
| **Odor** | Hydrocarbon |
| **Odor Threshold** | No data available. |

| **Property** | **Values (Method)** |
|---|---|
| **Melting Point / Freezing Point** | No data available. |
| **Initial Boiling Point / Boiling Range** | 24-210 °C / 75-410 °F (ASTM D86) |
| **Flash Point** | -43 °C / -45 °F |
| **Evaporation Rate** | No data available. |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammability Limit in Air (%):** | |
| **Upper Flammability Limit:** | 7.6 |
| **Lower Flammability Limit:** | 1.4 |
| **Explosion limits:** | No data available. |
| **Vapor Pressure** | 5.5-15 psi (ASTM D4814) |
| **Vapor Density** | 3-4 |
| **Specific Gravity / Relative Density** | 0.70-0.76 |
| **Water Solubility** | No data available. |
| **Solubility in other solvents** | No data available. |
| **Partition Coefficient** | 2.13-4.5 |
| **Decomposition temperature** | No data available. |
| **pH:** | Not applicable |
| **Autoignition Temperature** | 280 °C / 536 °F |
| **Kinematic Viscosity** | No data available. |
| **Dynamic Viscosity** | No data available. |
| **Explosive Properties** | No data available. |
| **VOC Content (%)** | 100% |
| **Density** | No data available. |
| **Bulk Density** | Not applicable. |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Reactivity** | The product is non-reactive under normal conditions. |
| **Chemical stability** | The material is stable at 70°F (21°C ), 760 mmHg pressure. |
| **Possibility of hazardous reactions** | None under normal processing. |
| **Hazardous polymerization** | Will not occur. |
| **Conditions to avoid** | Excessive heat, sources of ignition, open flame. |
| **Incompatible Materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | None known under normal conditions of use. |

## 11. TOXICOLOGICAL INFORMATION

**Potential short-term adverse effects from overexposures**

| | |
|---|---|
| **Inhalation** | May cause irritation of respiratory tract. May cause drowsiness or dizziness. Breathing high concentrations of this material in a confined space or by intentional abuse can cause irregular heartbeats which can cause death. |
| **Eye contact** | Exposure to vapor or contact with liquid may cause mild eye irritation, including tearing, stinging, and redness. |
| **Skin contact** | Irritating to skin. Effects may become more serious with repeated or prolonged contact. May be absorbed through the skin in harmful amounts. |

**Ingestion** May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

**Acute toxicological data**

| Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Gasoline<br>86290-81-5 | 14000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |
| Heptane (mixed isomers)<br>142-82-5 | - | 3000 mg/kg (Rabbit) | 103 g/m³ (Rat) 4 h |
| Butane (mixed isomers)<br>106-97-8 | - | - | 658 mg/L (Rat) 4 h |
| Pentane (mixed isomers)<br>78-78-4 | - | - | 450 mg/L (Mouse) 2 h |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | > 5000 mg/kg (Rat) | - | - |
| Toluene<br>108-88-3 | > 2000 mg/kg (Rat) | 8390 mg/kg (Rabbit) | 12.5 mg/L (Rat) 4 h |
| Xylene (mixed isomers)<br>1330-20-7 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.04 mg/L (Rat) 4 h |
| Benzene<br>71-43-2 | > 2000 mg/kg (Rat) | > 5000 mg/kg (Rabbit) | > 20 mg/l (Rat) 4 h |
| n-Hexane<br>110-54-3 | 15000 mg/kg (Rat) | 3000 mg/kg (Rabbit) | 48000 ppm (Rat) 4 h |
| Cumene<br>98-82-8 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 20 mg/L (Rat) 6 h |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 3280 mg/kg (Rat) | > 3160 mg/kg (Rabbit) | 18,000 mg/m³ (Rat) 4 h |
| Ethylbenzene<br>100-41-4 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | 17.2 mg/L (Rat) 4 h |
| Cyclohexane<br>110-82-7 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | 13.9 mg/L (Rat) 4 h |
| Octane<br>111-65-9 | - | - | 118 g/m³ (Rat) 4 h |
| 1,2,3-Trimethylbenzene<br>526-73-8 | - | - | - |
| Naphthalene<br>91-20-3 | 490 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 340 mg/m³ (Rat) 1 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

NAPHTHAS: In a large epidemiological study on over 15,000 employees at several petroleum refineries and amongst residents located near these refineries, no increased risk of kidney cancer was observed in association with gasoline exposures (a similar material). In a similar study, no increased risk of kidney cancer was observed among petroleum refinery workers, but there was a slight trend in the incidence of kidney cancers among service station employees, especially after a 30-year latency period. Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, in-depth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

C9 AROMATIC HYDROCARBONS: A developmental inhalation study was conducted in laboratory mice. Increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate were observed at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. A multi-generation reproduction inhalation study was conducted in laboratory rats.

Reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm, an exposure level at which significant maternal toxicity was observed. Reduced pup weight gain was also observed at 500 ppm.

BUTANES: Studies in laboratory animals indicate exposure to extremely high levels of butanes (1-10 or higher vol.% in air) may cause cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

PENTANES: Studies of pentane isomers in laboratory animals indicate exposure to extremely high levels (roughly 10 vol.%) may induce cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

TOLUENE: Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Abuse of toluene at high concentrations (e.g., glue sniffing and solvent abuse) has been associated with adverse effects on the liver, kidney and nervous system, and can cause CNS depression, cardiac arrhythmias, and death. Studies of workers indicate longterm exposure may be related to impaired color vision and hearing. Some studies of workers suggest longterm exposure may be related to neurobehavioral and cognitive changes. Some of these effects have been observed in laboratory animals following repeated exposure to high levels of toluene. Several studies of workers suggest longterm exposure may be related to small increases in spontaneous abortions and changes in some gonadotropic hormones. However, the weight of evidence does not indicate toluene is a reproductive hazard to humans. Studies in laboratory animals indicate some changes in reproductive organs following high levels of exposure, but no significant effects on mating performance or reproduction were observed. Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Findings in laboratory animals have been largely negative. Positive findings include small increases in minor skeletal and visceral malformations and developmental delays following very high levels of maternal exposure. Studies of workers indicate long-term exposure may be related to effects on the liver, kidney and blood, but these appear to be limited to changes in serum enzymes and decreased leukocyte counts. Adverse effects on the liver, kidney, thymus and nervous system were observed in animal studies following very high levels of exposure. The relevance of these findings to humans is not clear at this time.

XYLENES, ALL ISOMERS: Overexposure to xylene may cause upper respiratory tract irritation, headache, cyanosis, blood serum changes, nervous system damage and narcosis. Effects may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross overexposure. Effects from Prolonged or Repeated Exposure: Impaired neurological function was reported in workers exposed to solvents including xylene. Studies in laboratory animals have shown evidence of impaired hearing following high levels of exposure. Studies in laboratory animals suggest some changes in reproductive organs following high levels of exposure but no significant effects on reproduction were observed. Studies in laboratory animals indicate skeletal and visceral malformations, developmental delays, and increased fetal resorptions following extremely high levels of maternal exposure with evidence of maternal toxicity. The relevance of these observations to humans is not clear at this time. Adverse effects on the liver, kidney, bone marrow (changes in blood cell parameters) were observed in laboratory animals following high levels of exposure. The relevance of these observations to humans is not clear at this time.

BENZENE: Studies of workers exposed to benzene show clear evidence that overexposure can cause cancer and other diseases of the blood forming organs including Acute Myelogenous Leukemia (AML), and Aplastic Anemia (AA), an often fatal disease. Some studies suggest overexposure to benzene may also be associated with Myelodysplastic Syndrome (MDS). Findings from a case control study of workers exposed to benzene was reported during the 2009 Benzene Symposium in Munich included an increase in Acute Myeloid Leukemias and Non-Hodgkins Lymphoid Neoplasms (NHLN) of the subtype follicular lymphoma (FL) in some occupational categories. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene

suggested a weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of AA have been reported in the offspring of persons severely overexposed to benzene. Studies in laboratory animals indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and minor skeletal variations. Benzene has been classified as a proven human carcinogen by OSHA and a Group 1 (Carcinogenic to Humans) material by IARC. The current proposed IARC classification for benzene is summarized as follows: Sufficient evidence for Acute Myeloid Leukemia; limited evidence for Acute Lymphatic Leukemia, Chronic Lymphatic Leukemia, Non-Hodgkin Lymphoma, and Multiple Myeloma.

N-HEXANE: Long-term or repeated exposure to n-hexane can cause peripheral nerve damage. Initial symptoms are numbness of the fingers and toes. Also, motor weakness can occur in the digits, but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. Testicular atrophy and partial to full loss of the germ cell line were observed in sub-chronic high-dose inhalation studies of laboratory rodents. These effects appeared irreversible. Rodent reproduction studies have shown evidence of reduced fetal weight but no frank malformations.

CUMENE: Overexposure to cumene may cause upper respiratory tract irritation and CNS depression. Studies in laboratory animals indicate evidence of respiratory tract hyperplasia, and adverse effects on the liver, kidney and adrenal glands following high level exposure. The relevance of these findings to humans is not clear at this time. Findings from lifetime laboratory rodent inhalation studies were as follows: In F344/N rats: an increased incidence of renal carcinomas and adenomas, respiratory epithelial adenomas, and interstitial cell adenomas of the testes. In B6C3F1 mice: an increased incidence of carcinomas and adenomas of the bronchi and lung, liver neoplasms, hemangiosarcomas of the spleen, and adenomas of the thyroid.

1,2,4-TRIMETHYLBENZENE: The following information pertains to a mixture of C9 aromatic hydrocarbons, over 40% of which was composed of 1,2,4-trimethylbenzene. A developmental inhalation study was conducted in laboratory mice. Increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate were observed at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. A multi-generation reproduction inhalation study was conducted in laboratory rats. Reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm, an exposure level at which significant maternal toxicity was observed. Reduced pup weight gain was also observed at 500 ppm. Embryotoxicity has been reported in studies of laboratory animals. Adverse effects included increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate.<n><n>

ETHYLBENZENE: Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). The incidence of tumors was also elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure with evidence of maternal toxicity. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals have demonstrated evidence of ototoxicity (hearing loss)

following exposure levels as low as 300 ppm for 5 days. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

NAPHTHALENE: Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from overexposure to naphthalene. Persons with glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have been reported in persons overexposed to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect. Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) in vitro. Naphthalene has been classified as Possibly Carcinogenic to Humans (2B) by IARC, based on findings from studies in laboratory animals.

CARBON MONOXIDE: is a chemical asphyxiant with no warning properties (such as odor). At 400-500 ppm for 1 hour headache and dyspnea may occur. If activity is increased, symptoms of overexposure may include nausea, irritability, increased respiration, tinnitus, sweating, chest pain, confusion, impaired judgement, dizziness, weakness, drowsiness, ataxia, irregular heart beat, cyanosis and pallor. Levels in excess of 1000 ppm can result in collapse, loss of conciousness, respiratory failure and death. Extremely high concentrations (12,800 ppm) can cause immediate unconsciousness and death in 1-3 minutes. Repeated anoxia can lead to central nervous system damage and peripheral neuropathy, with loss of sensation in the fingers, amnesia, and mental deterioration and possible congestive heart failure. Damage may also occur to the fetus, lung, liver, kidney, spleen, cardiovascular system and other organs.

WHOLLY-VAPORIZED UNLEADED GASOLINE: Lifetime exposure to wholly vaporized unleaded gasoline produced an increased incidence of liver tumors in female mice exposed to the highest exposure concentration (2056 ppm) and α-2 urinary globulin-mediated kidney tumors in male rats. No exposure-related tumors were observed in male mice or female rats. The male-specific rat kidney tumors are not considered relevant to human health. Mice receiving lifetime repeated skin application of various petroleum naphthas exhibited an irritation-dependent increased incidence of skin tumors. Additional studies suggest that these tumors occur through a mechanism that may not be relevant to human health. Epidemiological data from over 18,000 petroleum marketing and distribution workers showed no increased risk of leukemia, multiple myeloma, or kidney cancer resulting from gasoline exposure. Unleaded gasoline has been identified as possibly carcinogenic to humans (2B) by the International Agency for Research on Cancer (IARC).

COMBUSTION ENGINE EXHAUST: Chronic inhalation studies of gasoline engine exhaust in mice, rats and hamsters did not produce any carcinogenic effects. Condensates/extracts of gasoline engine exhaust produced an increase in tumors compared to controls when testing by skin painting, subcutaneous injection, intratracheal instillation or implantation into the lungs. Gasoline exhaust has been classified as possibly carcinogenic to humans (2B) by the International Agency for Research on Cancer (IARC).

**Adverse effects related to the physical, chemical and toxicological characteristics**

**Signs and Symptoms**

Irritating to the skin and mucous membranes. Symptoms may include redness, itching, and inflammation. May cause nausea, vomiting, diarrhea, and signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Aspiration hazard. May cause coughing, chest pains, shortness of breath, pulmonary edema and/or chemical pneumonitis. Prolonged or repeated exposure may cause damage to organs. Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.

**Sensitization** Not expected to be a skin or respiratory sensitizer.

**Mutagenic effects** May cause genetic defects.

**Carcinogenicity** May cause cancer.

Cancer designations are listed in the table below

| Name | ACGIH (Class) | IARC (Class) | NTP | OSHA |
|---|---|---|---|---|
| Gasoline 86290-81-5 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Not Listed | Not Listed |
| Heptane (mixed isomers) 142-82-5 | Not Listed | Not Listed | Not Listed | Not Listed |
| Butane (mixed isomers) 106-97-8 | Not Listed | Not Listed | Not Listed | Not Listed |
| Pentane (mixed isomers) 78-78-4 | Not Listed | Not Listed | Not Listed | Not Listed |
| Hexane Isomers (other than n-Hexane) 107-83-5 | Not Listed | Not Listed | Not Listed | Not Listed |
| Toluene 108-88-3 | Not Classifiable (A4) | Not Classifiable (3) | Not Listed | Not Listed |
| Xylene (mixed isomers) 1330-20-7 | Not classifiable (A4) | Not classifiable (3) | Not Listed | Not Listed |
| Benzene 71-43-2 | Confirmed human carcinogen (A1) | Carcinogenic to humans (1) | Known to be human carcinogen | Known carcinogen |
| n-Hexane 110-54-3 | Not Listed | Not Listed | Not Listed | Not Listed |
| Cumene 98-82-8 | Not listed | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not listed |
| 1,2,4 Trimethylbenzene 95-63-6 | Not Listed | Not Listed | Not Listed | Not Listed |
| Ethylbenzene 100-41-4 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Not Listed | Not Listed |
| Cyclohexane 110-82-7 | Not Listed | Not Listed | Not Listed | Not Listed |
| Octane 111-65-9 | Not Listed | Not Listed | Not Listed | Not Listed |
| 1,2,3-Trimethylbenzene 526-73-8 | Not Listed | Not Listed | Not Listed | Not Listed |
| Naphthalene 91-20-3 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not Listed |

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity (STOT) - single exposure** Respiratory system. Central nervous system.

**Specific Target Organ Toxicity (STOT) - repeated exposure** Blood. Blood-forming organs. Immune system.

**Aspiration hazard** May be fatal if swallowed or vomited and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product should be considered toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

| Name | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|---|---|---|---|---|
| Gasoline 86290-81-5 | 72-hr EC50 = 56 mg/l Algae | 96-hr LC50 = 11 mg/l Rainbow trout (static) | - | 48-hr LC50 = 7.6 mg/l Daphnia magna |
| Heptane (mixed isomers) | - | 96-hr LC50 = 375 mg/L | - | - |

| | | | | |
|---|---|---|---|---|
| 142-82-5 | | Tilapia | | |
| Butane (mixed isomers)<br>106-97-8 | - | - | - | - |
| Pentane (mixed isomers)<br>78-78-4 | - | 96-hr LC50 = 3.1 mg/L<br>Rainbow trout | - | 48-hr EC50 = >1 - <10 mg/L<br>Daphnia magna |
| Hexane Isomers (other than n-Hexane)<br>107-83-5 | - | - | - | - |
| Toluene<br>108-88-3 | 72-hr EC50 = 12.5 mg/l<br>Algae | 96-hr LC50 <= 10 mg/l<br>Rainbow trout | - | 48-hr EC50 = 5.46-9.83 mg/l<br>Daphnia magna<br>48-hr EC50 = 11.5 mg/l<br>Daphnia magna (Static) |
| Xylene (mixed isomers)<br>1330-20-7 | 72-hr EC50 = 11 mg/l<br>Algae | 96-hr LC50 = 8 mg/l<br>Rainbow trout | - | 48-hr LC50 = 3.82 mg/l<br>Daphnia magna |
| Benzene<br>71-43-2 | 72-hr EC50 = 29 mg/l<br>Algae | 96-hr LC50 = 5.3 mg/l<br>Rainbow trout<br>(flow-through) | - | 48-hr EC50 = 8.76-15.6 mg/l<br>Daphnia magna (Static) |
| n-Hexane<br>110-54-3 | - | 96-hr LC50 = 2.5 mg/l<br>Fathead minnow | - | - |
| Cumene<br>98-82-8 | 72-hr EC50 = 2.6 mg/l<br>Algae | 96-hr LC50 = 6.04-6.61 mg/l<br>Fathead minnow<br>(Flow-through)<br>96-hr LC50 = 2.7 mg/l<br>Rainbow trout (semi-static) | - | 48-hr EC50 = 7.9-14.1 mg/l<br>Daphnia magna (static) |
| 1,2,4 Trimethylbenzene<br>95-63-6 | - | 96-hr LC50 = 7.19-8.28 mg/l<br>Fathead minnow<br>(flow-through) | - | 48-hr EC50 = 6.14 mg/L<br>Daphnia magna |
| Ethylbenzene<br>100-41-4 | 72-hr EC50 = 1.7-7.6 mg/l<br>Algae | 96-hr LC50 = 4 mg/L<br>Rainbow trout | - | 48-hr EC50 = 1-4 mg/L<br>Daphnia magna |
| Cyclohexane<br>110-82-7 | 72-hr EC50 = 500 mg/l<br>Algae | 96-hr LC50 = 3.96-5.18 mg/l<br>Fathead minnow | - | 48-hr EC50 = 1.7-3.5 mg/L<br>Bay shrimp |
| Octane<br>111-65-9 | - | - | - | 48-hr LC50 = 0.38 mg/l<br>Daphnia magna |
| 1,2,3-Trimethylbenzene<br>526-73-8 | - | 96-hr LC50 = 7.72 mg/l<br>Fathead Minnow<br>(flow-through) | - | - |
| Naphthalene<br>91-20-3 | - | 96-hr LC50 = 0.91-2.82 mg/l<br>Rainbow trout (static)<br>96-hr LC50 = 1.99 mg/l<br>Fathead minnow (static) | - | 48-hr LC50 = 1.6 mg/l<br>Daphnia magna |

**Persistence and degradability** Expected to be inherently biodegradable. The presence of ethanol in this product may impede the biodegradation of benzene, toluene, ethylbenzene and xylene in groundwater, resulting in elongated plumes of these constituents.

**Bioaccumulation** Has the potential to bioaccumulate.

**Mobility in soil** May partition into air, soil and water.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Description of Waste Residues**
This material may be a flammable liquid waste.

**Safe Handling of Wastes**
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking.

**Disposal of Wastes / Methods of Disposal**
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

**Methods of Contaminated Packaging Disposal**
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT (49 CFR 172.101):**

| | |
|---|---|
| **UN Proper Shipping Name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Class:** | 3 |
| **Packing Group:** | II |

**TDG (Canada):**

| | |
|---|---|
| **UN Proper Shipping Name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Transport Hazard Class(es):** | 3 |
| **Packing Group:** | II |

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List.

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Gasoline | NA |
| Heptane (mixed isomers) | NA |
| Butane (mixed isomers) | NA |
| Pentane (mixed isomers) | NA |
| Hexane Isomers (other than n-Hexane) | NA |
| Toluene | NA |
| Xylene (mixed isomers) | NA |
| Benzene | NA |
| n-Hexane | NA |
| Cumene | NA |
| 1,2,4 Trimethylbenzene | NA |
| Ethylbenzene | NA |
| Cyclohexane | NA |
| Octane | NA |
| 1,2,3-Trimethylbenzene | NA |
| Naphthalene | NA |

**SARA Section 304:** This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | Hazardous Substances RQs |
|---|---|
| Gasoline | NA |
| Heptane (mixed isomers) | NA |
| Butane (mixed isomers) | NA |
| Pentane (mixed isomers) | NA |
| Hexane Isomers (other than n-Hexane) | NA |

| | |
|---|---|
| Toluene | 1000 lb final RQ<br>454 kg final RQ |
| Xylene (mixed isomers) | 100 |
| Benzene | 10 |
| n-Hexane | 5000 |
| Cumene | 5000 |
| 1,2,4 Trimethylbenzene | NA |
| Ethylbenzene | 1000 |
| Cyclohexane | 1000 |
| Octane | NA |
| 1,2,3-Trimethylbenzene | NA |
| Naphthalene | 100 lb final RQ<br>45.4 kg final RQ |

**SARA Section 311/312:** The following EPA hazard categories apply to this product:

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

**SARA Section 313:** This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Gasoline | None |
| Heptane (mixed isomers) | None |
| Butane (mixed isomers) | None |
| Pentane (mixed isomers) | None |
| Hexane Isomers (other than n-Hexane) | None |
| Toluene | 1.0 % de minimis concentration |
| Xylene (mixed isomers) | 1.0 % de minimis concentration |
| Benzene | 0.1 % de minimis concentration |
| n-Hexane | 1.0 % de minimis concentration |
| Cumene | 1.0 % de minimis concentration |
| 1,2,4 Trimethylbenzene | 1.0 % de minimis concentration |
| Ethylbenzene | 0.1 % de minimis concentration |
| Cyclohexane | 1.0 % de minimis concentration |
| Octane | None |
| 1,2,3-Trimethylbenzene | None |
| Naphthalene | 0.1 % de minimis concentration |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Gasoline

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0957 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree |
| New Jersey - Environmental Hazardous | SN 0957 TPQ: 10000 lb (Under N.J.A.C. 7:1G, environmental |

| | |
|---|---|
| Substances List: | hazardous substances in mixtures such as gasoline or new and used petroleum oil may be reported under these categories) |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Heptane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1339 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Butane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0273 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - fourth degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0273 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Pentane (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1064 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - fourth degree |
| New Jersey - Environmental Hazardous Substances List: | SN 1064 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - | Not Listed |

| | |
|---|---|
| List of Hazardous Substances: | |
| Hexane Isomers (other than n-Hexane) | |
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1285 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |
| Toluene | |
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Developmental toxicity, initial date 1/1/91<br>Female reproductive toxicity, initial date 8/7/09 |
| New Jersey Right-To-Know: | SN 1866 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree; Teratogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1866 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |
| Xylene (mixed isomers) | |
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 2014 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold all isomers |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 2014 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |
| Benzene | |
| Louisiana Right-To-Know: | Not Listed |

| | |
|---|---|
| California Proposition 65: | Carcinogen, initial date 2/27/87<br>Developmental toxicity, initial date 12/26/97<br>Male reproductive toxicity, initial date 12/26/97 |
| New Jersey Right-To-Know: | SN 0197 |
| Pennsylvania Right-To-Know: | Environmental hazard; Special hazardous substance |
| Massachusetts Right-To Know: | Carcinogen; Extraordinarily hazardous |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin); Carcinogen (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Carcinogen; Extraordinarily hazardous |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Present |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree; Mutagen |
| New Jersey - Environmental Hazardous Substances List: | SN 0197 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 10 lb RQ (air); 1 lb RQ (land/water) |

n-Hexane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1340 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 1340 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1 lb RQ (air); 1 lb RQ (land/water) |

Cumene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 4/6/10 |
| New Jersey Right-To-Know: | SN 0542 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0542 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 5000 lb RQ (air); 1 lb RQ (land/water) |

1,2,4 Trimethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1929 |

| | |
|---|---|
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Ethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 6/11/04 |
| New Jersey Right-To-Know: | SN 0851 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen; flammable - Third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0851 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Cyclohexane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 0565 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0565 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Octane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1434 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |

| | |
|---|---|
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

1,2,3-Trimethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | SN 1929 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Naphthalene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Carcinogen, initial date 4/19/02 |
| New Jersey Right-To-Know: | SN 1322 SN 3758 |
| Pennsylvania Right-To-Know: | Environmental hazard Present (particulate) |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Carcinogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1322 TPQ: 500 lb (Reportable at the de minimis quantity of >0.1%) |
| Illinois - Toxic Air Contaminants: | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 100 lb RQ (air); 1 lb RQ (land/water) |

**Canada DSL/NDSL Inventory:** This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

**Canadian Regulatory Information:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

| Name | Canada - WHMIS: Classifications of Substances: | Canada - WHMIS: Ingredient Disclosure: |
|---|---|---|
| Gasoline | B2,D2A,D2B | 0.1% |
| Heptane (mixed isomers) | B2,D2B | 1% |

| | | |
|---|---|---|
| Butane (mixed isomers) | A,B1 | 1% |
| Pentane (mixed isomers) | B2 | 1% |
| Hexane Isomers (other than n-Hexane) | B2 | 1% |
| Toluene | B2,D2A,D2B | 0.1% |
| Xylene (mixed isomers) | B2,D2A,D2B | m-, o-isomers 1.0%; p-isomer 0.1% |
| Benzene | B2,D2A,D2B | 0.1% |
| n-Hexane | B2,D2A,D2B | 1% |
| Cumene | B2,D2A | 0.1% |
| 1,2,4 Trimethylbenzene | B3,D2B | 1% |
| Ethylbenzene | B2,D2A,D2B | 0.1% |
| Cyclohexane | B2,D2B | 1% |
| Octane | B2,D2B | 1% |
| 1,2,3-Trimethylbenzene | B3 | 1% |
| Naphthalene | B4,D2A | 0.1% |

**Note:** Not applicable.

## 16. OTHER INFORMATION

**Prepared By** Toxicology and Product Safety

**Revision Notes**

**Revision Date** 03/19/2018
**Previous Publish Date** 11/06/2017
**Revised Sections** The following sections (§) have been updated:
2. HAZARD IDENTIFICATION
3. COMPOSITION/INFORMATION ON INGREDIENTS
4. FIRST AID MEASURES
11. TOXICOLOGICAL INFORMATION

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

# Material Safety Data Sheet

**MSDS ID NO.:** 0118SPE012
**Revision date:** 06/02/2006

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product code:** SW02

**Product name:** SSA Speedway 10W-40 Motor Oil
**Synonym:** Speedway 10W-40 Motor Oil; 10W-40 Speedway Motor Oil
**Chemical Family:** Motor/Lube Oil
**Formula:** Mixture

**Manufacturer:**
Speedway/Superamerica LLC
P O BOX 1500
ENON OH 45501

**Other information:** 419-421-3070
**Emergency telephone number:** 877-627-5463

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Motor oil is a complex mixture of highly refined lubricating oil base stocks and additives.

**Product information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| SSA Speedway 10W-40 Motor Oil | Mixture | 100 | | | |

**Component Information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | 64742-54-7 | 92-95 | | | |
| Additives | Not specified | 5-8 | | | |
| Zinc Alkyl Dithiophosphate | 68649-42-3 | 0.7-1.0 | | | |

**Notes:** The manufacturer has voluntarily elected to reflect exposure limits contained in OSHA's 1989 air contaminants standard in its MSDS's, even though certain of those exposure limits were vacated in 1992.

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

MOTOR OIL IS A NON-VOLATILE AND NON-COMBUSTIBLE, AMBER COLORED LIQUID, BUT WILL IGNITE AND BURN AT ELEVATED TEMPERATURES.

**OSHA WARNING LABEL:**

**THIS PRODUCT HAS BEEN EVALUATED AND DOES NOT REQUIRE ANY HAZARD WARNING LABEL UNDER THE OSHA HAZARD COMMUNICATION STANDARD.**

**CONSUMER WARNING LABEL:**

**A CONSUMER WARNING LABEL IS NOT APPLICABLE FOR THIS PRODUCT.**

**Inhalation:** No acute effects expected from routine operations. Overheating of product may produce vapors which can cause respiratory irritation, dizziness and nausea.

**Ingestion:** Product has a low order of acute toxicity. This is based on data from components or similar products.

**Skin contact:** Prolonged or repeated liquid contact can cause dermatitis, folliculitis or oil acne.

**Eye contact:** Liquid or vapor contact may result in slight eye irritation.

**Carcinogenic Evaluation:**

**Product information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| SSA Speedway 10W-40 Motor Oil Mixture | NE | | | |

**Notes:** The International Agency for Research on Cancer (IARC) has determined that there is no evidence that severely solvent-refined oils are carcinogenic to experimental animals.

**Component Information:**

## 4. FIRST AID MEASURES

**Inhalation:** If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.

**Skin contact:** Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.

If product is accidentally injected into or under the skin, regardless of wound size or initial absence of symptoms, the individual should be evaluated immediately by a physician as a surgical emergency.

**Ingestion:** Not expected to be acutely toxic. If large amounts are swallowed, immediately call a physician.

**Eye contact:** Flush eyes with large amounts of tepid water for at least 15 minutes. If symptoms or irritation occur, call a physician.

**Notes to physician:** High velocity injection under the skin may result in serious injury. If left untreated the affected area is subject to infection, disfigurement, lack of blood circulation and may require amputation. When dispensed by high pressure equipment this material can easily penetrate the skin and leave a bloodless puncture wound. Material injected into a finger can be deposited into the palm of the hand. Within 24-48 hours the patient may experience swelling, discoloration, and throbbing pain in the affected area. Immediate treatment by a surgical specialist is recommended.

**Medical conditions aggravated by exposure:** Skin contact could aggravate an existing skin disorder or dermatitis condition.

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFT/ATC) can be used. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Specific hazards:** This material is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at elevated temperatures.

**Special protective equipment for firefighters:** Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Flash point:** >435 F, >223.8 C (COC)
**Autoignition temperature:** No data available.
**Flammable limits in air - lower (%):** No data available.
**Flammable limits in air - upper (%):** No data available.

**NFPA rating:**
Health: 1
Flammability: 1
Reactivity: 0
Other: -

**HMIS classification:**
Health: 1
Flammability: 1
Reactivity: 0
Special: *See Section 8 for guidance in selection of personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Advise authorities and National Response Center (800-424-8802) if substance has entered a watercourse or sewer. Advise local and state emergency services agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

## 7. HANDLING AND STORAGE

**Handling:**

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Do not pressurize or expose to heat, open flames, strong oxidizers or other sources of ignition.

Avoid repeated and prolonged skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**PERSONAL PROTECTIVE EQUIPMENT**

**Engineering measures:** Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

| | |
|---|---|
| **Respiratory protection:** | Not required under normal conditions and adequate ventilation. Approved organic vapor chemical cartridge or supplied air respirators should be worn for exposures to any components exceeding the TLV or STEL. Observe respirator protection factor criteria cited in ANSI Z88.2. Self-contained breathing apparatus should be used for fire fighting. |
| **Skin and body protection:** | Use chemical resistant gloves such as neoprene, nitrile, or PVA to prevent prolonged or repeated skin contact. |
| **Eye protection:** | No special eye protection is normally required. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Appearance:** | Amber Liquid |
| **Physical state (Solid/Liquid/Gas):** | Liquid |
| **Substance type (Pure/Mixture):** | Mixture |
| **Color:** | Amber |
| **Odor:** | Hydrocarbon |
| **Molecular weight:** | Not determined. |
| **pH:** | Neutral |
| **Boiling point/range (5-95%):** | >425 F, > 218.3 C |
| **Melting point/range:** | Not determined. |
| **Decomposition temperature:** | Not applicable. |
| **Specific gravity:** | Not determined |
| **Density:** | 7.34 lbs/gal @ 60 F |
| **Bulk density:** | No data available. |
| **Vapor density:** | No data available. |
| **Vapor pressure:** | Not determined. |
| **Evaporation rate:** | No data available. |
| **Solubility:** | Not determined |
| **Solubility in other solvents:** | No data available. |
| **Partition coefficient (n-octanol/water):** | >4.9 |
| **VOC content(%):** | No data available. |
| **Viscosity:** | 96.5 cSt @ 40 C<br>14.0 cSt @ 100 C |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | The material is stable at 70 F, 760 mm pressure. |
| **Polymerization:** | Will not occur. |
| **Hazardous decomposition products:** | Carbon monoxide, carbon dioxide, hydrogen sulfide, oxides of sulfur, oxides of nitrogen, oxides of zinc, aldehydes and hydrocarbons., Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150 F. |
| **Materials to avoid:** | Strong oxidizers such as nitrates, chlorates, peroxides. |
| **Conditions to avoid:** | Heat and open flames. |

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

**Product information:**

| Name | CAS Number | Inhalation: | Dermal: | Oral: |
|---|---|---|---|---|
| SSA Speedway 10W-40 Motor Oil | Mixture | LD50 = 2.18 to >4 mg/l [Rat] | LD50 > 2 gm/kg [Rabbit] | LD50 >5 ml/kg [Rat] |

Based on data from components this product is considered to have a low order of acute oral and dermal toxicity. Chronic skin painting studies with severely solvent refined neutral oils did not produce evidence of skin cancer in mice.

This product contains approximately 0-1.5% of a zinc alkyl dithiophosphate (ZDDP) additive. ZDDP has been found to have weak mutagenic activity in cultured cells. Repeated dermal exposures of ZDDP produced severe skin irritation, significant weight loss and testicular atrophy in male rabbits but not male rats at high concentrations. Subsequent research showed that the testicular effect was due to the severe stress and weight loss as seen with other caustic materials and not a direct effect of ZDDP. The concentration of ZDDP in this product is significantly lower than exposure levels that produced these effects in rabbits.

Used motor oil applied to the skin of rabbits at doses of 8 ml/kg/day, 5 days/wk, for two weeks, produced significant weight loss and skin irritation but no mortality. Used motor oil was found to produce skin tumors in mice in lifetime skin painting studies. Solvent extracts of used motor oils were found to be positive in the Ames mutagenicity test.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** Water accomated fractions (WAF) of highly refined base oils did not produce acute toxicity in fish (100-1000 mg/l), fresh water algae (500 mg/l) or daphnia (10,000 mg/l) in 48-96 hour LC50 studies.

Used motor and/or lube oils can be toxic to birds and fish.

## 13. DISPOSAL CONSIDERATIONS

**Cleanup Considerations:** This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. This material could become a hazardous waste if mixed or contaminated with a hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Don't pollute. Conserve resources. Send used product to recycling center. Dispose of cleanup materials in accordance with applicable local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**49 CFR 172.101:**

**DOT:**

**Transport Information:** This material when transported via US commerce is NOT REGULATED by DOT regulations.

**Packing group:** Not applicable.
**DOT reportable quantity (lbs):** Not applicable.

**TDG (Canada):**

**Packing group:** Not applicable.
**Regulated substances:** Not applicable.

# 15. REGULATORY INFORMATION

**Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: This product has been evaluated and determined not to be hazardous as defined in OSHA's Hazard Communication Standard.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product contains the following component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Alkyl Dithiophosphate | NA |

**SARA Section 304:** This product contains the following component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Alkyl Dithiophosphate | NA |

**SARA Section 311/312:** The following EPA hazard categories apply to this product:

None

**SARA Section 313:** This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) From R:

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | None |
| Additives | None |
| Zinc Alkyl Dithiophosphate | None |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Distillates, Hydrotreated Heavy Paraffinic

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |

| | |
|---|---|
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Additives

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Zinc Alkyl Dithiophosphate

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

**Canadian Regulatory Information:**

| | |
|---|---|
| Canada DSL/NDSL Inventory: | This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt. |

## 16. OTHER INFORMATION

**Additional Information:** No data available.

**Prepared by:** Craig M. Parker Manager, Toxicology and Product Safety

The information and recommendations contained herein are based upon tests believed to be reliable. However, Speedway SuperAmerica (SSA) does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage maybe required. SSA assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

**End of Safety Data Sheet**

# Material Safety Data Sheet

**MSDS ID NO.:** 0130SPE012
**Revision date:** 05/25/2011

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product name:** Speedway Dexron III/Mercon Automatic Transmission Fluid
**Synonym:** Dexron-III/Mercon Automatic Transmission Fluid, Speedway; Speedway Dexron ATF; Speedway Mercon ATF
**Chemical Family:** Motor/Lube Oil
**Formula:** Mixture

**Manufacturer:**
Marathon Petroleum Company LP
539 South Main Street
Findlay OH 45840

**Other information:** 419-421-3070
**Emergency telephone number:** 877-627-5463

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Lube oil is a complex mixture of highly refined lubricating base stocks and additives.

**Product information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Speedway Dexron III/Mercon ATF | Mixture | 100 | | | |

**Component Information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate | 64742-54-7 | 93-95 | | | Mineral Oil Mist (MOM) =5 mg/m$^3$ TWA = 10 mg/m$^3$ STEL |
| Additives | Not specified | 5-7 | | | |

**Notes:** The manufacturer has voluntarily elected to reflect exposure limits contained in OSHA's 1989 air contaminants standard in its MSDS's, even though certain of those exposure limits were vacated in 1992.

## 3. HAZARDS IDENTIFICATION

# EMERGENCY OVERVIEW

THIS LUBRICANT IS A NON-VOLATILE AND NON-COMBUSTIBLE, AMBER COLORED LIQUID, BUT WILL IGNITE AND BURN AT ELEVATED TEMPERATURES.

**Inhalation:**

No acute effects expected from routine operations. Overheating of product may produce vapors which can cause respiratory irritation, dizziness and nausea.

**Ingestion:**

Product has a low order of acute toxicity. This is based on data from components or similar products.

**Skin contact:**

Prolonged or repeated liquid contact can cause dermatitis, folliculitis or oil acne.

**Eye contact:**

Liquid or vapor contact may result in slight eye irritation.

**Carcinogenic Evaluation:**

**Product information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| Speedway Dexron III/Mercon ATF Mixture | NE | | | |

**Notes:** The International Agency for Research on Cancer (IARC) has determined that there is no evidence that severely solvent-refined oils are carcinogenic to experimental animals.

**Component Information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate 64742-54-7 | Supplement 7 [1987], Monograph 33 [1984] | | | Present |

## 4. FIRST AID MEASURES

**Eye Contact:**

Flush eyes with large amounts of tepid water for at least 15 minutes. If symptoms or irritation occur, call a physician.

**Skin Contact:**

Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.

If product is accidentally injected into or under the skin, regardless of wound size or initial absence of symptoms, the individual should be evaluated immediately by a physician as a surgical emergency.

**Ingestion:**

Not expected to be acutely toxic. If large amounts are swallowed, immediately call a physician.

**Inhalation:**

If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.

**NOTES TO PHYSICIAN:**

No data available.

**Medical Conditions Aggravated By Exposure:**

Skin contact could aggravate an existing skin disorder or dermatitis condition.

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Specific hazards:**

This material is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at elevated temperatures.

**Special protective equipment for firefighters:**

Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Flash point:** 400 F, 204.4 C (COC)
**Autoignition temperature:** No data available.
**Flammable limits in air - lower (%):** No data available.
**Flammable limits in air - upper (%):** No data available.

**NFPA rating:**
Health: 1
Flammability: 1
Instability: 0
Other: -

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Advise local and state emergency services agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

## 7. HANDLING AND STORAGE

**Handling:**

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Do not pressurize or expose to heat, open flames, strong oxidizers or other sources of ignition.

Avoid repeated and prolonged skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**PERSONAL PROTECTIVE EQUIPMENT**

**Engineering measures:** Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

**Respiratory protection:** Not required under normal conditions and adequate ventilation. Approved organic vapor chemical cartridge or supplied air respirators should be worn when significant vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Skin and body protection:** Use chemical resistant gloves such as neoprene, nitrile, or PVA to prevent prolonged or repeated skin contact.

**Eye protection:** No special eye protection is normally required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Appearance:** | Amber Liquid |
| **Physical state (Solid/Liquid/Gas):** | Liquid |
| **Substance type (Pure/Mixture):** | Mixture |
| **Color:** | Amber |
| **Odor:** | Hydrocarbon |
| **Molecular weight:** | Not determined. |
| **pH:** | Neutral |
| **Boiling point/range (5-95%):** | 686-966 F |

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Melting point/range:** | Not determined. |
| **Decomposition temperature:** | Not applicable. |
| **Specific gravity:** | 0.880 @ 60 F |
| **Density:** | 7.32 lbs/gal @ 60 F |
| **Bulk density:** | No data available. |
| **Vapor density:** | No data available. |
| **Vapor pressure:** | <1 mm Hg @ 100 F |
| **Evaporation rate:** | No data available. |
| **Solubility:** | <1% |
| **Solubility in other solvents:** | No data available. |
| **Partition coefficient (n-octanol/water):** | >4.9 |
| **VOC content(%):** | No data available. |
| **Viscosity:** | 60.0 cSt @ 40 C<br>9.5 cSt @ 100 C |

## 10. STABILITY AND REACTIVITY

**Stability:** The material is stable at 70 F, 760 mm pressure.

**Polymerization:** Will not occur.

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide, hydrogen sulfide, oxides of sulfur, oxides of nitrogen, oxides of zinc, aldehydes and hydrocarbons., Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150 F.

**Materials to avoid:** Strong oxidizers such as nitrates, chlorates, peroxides.

**Conditions to avoid:** Heat and open flames.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

**Product information:**

| Name | CAS Number | Inhalation: | Dermal: | Oral: |
|---|---|---|---|---|
| Speedway Dexron III/Mercon ATF | Mixture | LD50 = 2.18 to > 4 mg/l [Rat] | LD50 > 2 gm/kg [Rabbit] | LD50 > 5 ml/kg [Rat] |

**Toxicology Information:**

Based on data from components this product is considered to have a low order of acute oral and dermal toxicity. Chronic skin painting studies with severely solvent refined neutral oils did not produce evidence of skin cancer in mice.

This product contains approximately 0-1.5% of a zinc alkyl dithiophosphate (ZDDP) additive. ZDDP has been found to have weak mutagenic activity in cultured cells. Repeated dermal exposures of ZDDP produced severe skin irritation, significant weight loss and testicular atrophy in male rabbits but not male rats at high concentrations. Subsequent research showed that the testicular effect was due to the severe stress and weight loss as seen with other caustic materials and not a direct effect of ZDDP. The concentration of ZDDP in this product is significantly lower than exposure levels that produced these effects in rabbits.

## 12. ECOTOXICOLOGICAL INFORMATION

**Mobility:**

No data available.

**Ecotoxicity:**

No data available.

**Bioaccummulation:**

No data available.

**Persistance/Biodegradation:**

Water accomated fractions (WAF) of highly refined base oils did not produce acute toxicity in fish (100-1000 mg/l), fresh water algae (500 mg/l) or daphnia (10,000 mg/l) in 48-96 hour LC50 studies.

Used motor and/or lube oils can be toxic to birds and fish.

## 13. DISPOSAL CONSIDERATIONS

**Cleanup Considerations:**

This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. This material could become a hazardous waste if mixed or contaminated with a hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Don't pollute. Conserve resources. Send used product to recycling center. Dispose of cleanup materials in accordance with applicable local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**49 CFR 172.101:**

**DOT:**

**Transport Information:** This material when transported via US commerce is NOT REGULATED by DOT regulations.

**Packing group:** Not applicable.

**DOT reportable quantity (lbs):** Not applicable.

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: This product has been evaluated and determined not to be hazardous as defined in OSHA's Hazard Communication Standard.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product contains the following component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate | NA |
| Additives | NA |

**SARA Section 304:** This product contains the following component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate | NA |
| Additives | NA |

**SARA Section 311/312** The following EPA hazard categories apply to this product:

None

**SARA Section 313:** This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) From R:

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate | None |
| Additives | None |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Solvent Refined, Hydrotreated Heavy Paraffinic Distillate

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | carcinogen |

| | |
|---|---|
| Solvent Refined, Hydrotreated Heavy Paraffinic Distillate | |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |
| Additives | |
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

**Canadian Regulatory Information:**

| | |
|---|---|
| Canada DSL/NDSL Inventory: | This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt. |
| **NOTE:** | Not Applicable. |

## 16. OTHER INFORMATION

**Additional Information:** No data available.

**Prepared by:** Mark S. Swanson, Manager, Toxicology and Product Safety

The information and recommendations contained herein are based upon tests believed to be reliable. However, Speedway LLC does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage maybe required. Speedway assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

**End of Safety Data Sheet**

# Material Safety Data Sheet

**MSDS ID NO.:** 0119SPE012
**Revision date:** 05/25/2011

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product code:** SW03
**Product name:** Speedway 15W-40 Heavy Duty Diesel Motor Oil
**Synonym:** Speedway 15W-40 HD Diesel Motor Oil; Speedway 15W-40 Motor Oil; 15W-40 Speedway Motor Oil
**Chemical Family:** Motor/Lube Oil
**Formula:** Mixture

**Manufacturer:**
Speedway LLC
P.O. Box 1500
Enon, OH 45501

**Other information:** 419-421-3070
**Emergency telephone number:** 877-627-5463

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Motor oil is a complex mixture of highly refined lubricating oil base stocks and additives.

**Product information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Speedway 15W-40 HD Diesel Motor Oil | Mixture | 100 | | | |

**Component Information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Distillates, Petroleum Solvent-Refined Heavy Paraffinic | 64741-88-4 | 88-93 | | | Mineral Oil Mist (MOM) =5 mg/m$^3$ TWA = 10 mg/m$^3$ STEL |
| Additives | Not specified | 7-11 | | | |
| Zinc Dialkyl Dithiophosphate | 68457-79-4 | 1.2-1.5 | | | |

**Notes:** The manufacturer has voluntarily elected to reflect exposure limits contained in OSHA's 1989 air contaminants standard in its MSDS's, even though certain of those exposure limits were vacated in 1992.

## 3. HAZARDS IDENTIFICATION

# EMERGENCY OVERVIEW

MOTOR OIL IS A NON-VOLATILE AND NON-COMBUSTIBLE, AMBER COLORED LIQUID, BUT WILL IGNITE AND BURN AT ELEVATED TEMPERATURES.

**Inhalation:**

No acute effects expected from routine operations. Overheating of product may produce vapors which can cause respiratory irritation, dizziness and nausea.

**Ingestion:**

Product has a low order of acute toxicity. This is based on data from components or similar products.

**Skin contact:**

Prolonged or repeated liquid contact can cause dermatitis, folliculitis or oil acne.

**Eye contact:**

Liquid or vapor contact may result in slight eye irritation.

**Carcinogenic Evaluation:**

**Product information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| Speedway 15W-40 HD Diesel Motor Oil Mixture | NE | | | |

**Notes:** The International Agency for Research on Cancer (IARC) has determined that there is no evidence that severely solvent-refined oils are carcinogenic to experimental animals.

**Component Information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| Distillates, Petroleum Solvent-Refined Heavy Paraffinic 64741-88-4 | Supplement 7 [1987], Monograph 33 [1984] | | | Present |

## 4. FIRST AID MEASURES

**Eye Contact:**

Flush eyes with large amounts of tepid water for at least 15 minutes. If symptoms or irritation occur, call a physician.

**Skin Contact:**

Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.

If product is accidentally injected into or under the skin, regardless of wound size or initial absence of symptoms, the individual should be evaluated immediately by a physician as a surgical emergency.

**Ingestion:**

Not expected to be acutely toxic. If large amounts are swallowed, immediately call a physician.

**Inhalation:**

If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.

**NOTES TO PHYSICIAN:**

No data available.

**Medical Conditions Aggravated By Exposure:**

Skin contact could aggravate an existing skin disorder or dermatitis condition.

## 5. FIRE FIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media:** | For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment. |
| **Specific hazards:** | This material is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at elevated temperatures. |
| **Special protective equipment for firefighters:** | Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources. |
| **Flash point:** | >425 F, >218.3 C |
| **Autoignition temperature:** | No data available. |
| **Flammable limits in air - lower (%):** | No data available. |
| **Flammable limits in air - upper (%):** | No data available. |

**NFPA rating:**
Health: 1
Flammability: 1
Instability: 0
Other: -

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Advise local and state emergency services agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

## 7. HANDLING AND STORAGE

**Handling:**

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Do not pressurize or expose to heat, open flames, strong oxidizers or other sources of ignition.

Avoid repeated and prolonged skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**PERSONAL PROTECTIVE EQUIPMENT**

**Engineering measures:** Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

**Respiratory protection:** Not required under normal conditions and adequate ventilation. Approved organic vapor chemical cartridge or supplied air respirators should be worn for exposures to any components exceeding the TWA or STEL. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Skin and body protection:** Use chemical resistant gloves such as neoprene, nitrile, or PVA to prevent prolonged or repeated skin contact.

**Eye protection:** No special eye protection is normally required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Appearance:** | Amber Liquid |
| **Physical state (Solid/Liquid/Gas):** | Liquid |
| **Substance type (Pure/Mixture):** | Mixture |
| **Color:** | Amber |
| **Odor:** | Hydrocarbon |
| **Molecular weight:** | Not determined. |
| **pH:** | Neutral |
| **Boiling point/range (5-95%):** | >425 F, >218.3 C |

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Melting point/range:** | Not determined. |
| **Decomposition temperature:** | Not applicable. |
| **Specific gravity:** | 0.890 @ 60 F |
| **Density:** | 7.44 lbs/gal @ 60 F |
| **Bulk density:** | No data available. |
| **Vapor density:** | No data available. |
| **Vapor pressure:** | Not determined. |
| **Evaporation rate:** | No data available. |
| **Solubility:** | Not determined |
| **Solubility in other solvents:** | No data available. |
| **Partition coefficient (n-octanol/water):** | >4.9 |
| **VOC content(%):** | No data available. |
| **Viscosity:** | 118.1 cSt @ 40 C<br>15.0 cSt @ 100 C |

## 10. STABILITY AND REACTIVITY

**Stability:** The material is stable at 70 F, 760 mm pressure.

**Polymerization:** Will not occur.

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide, aldehydes, hydrocarbons., Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150 F.

**Materials to avoid:** Strong oxidizers such as nitrates, chlorates, peroxides.

**Conditions to avoid:** Heat and open flames.

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

**Product information:**

| Name | CAS Number | Inhalation: | Dermal: | Oral: |
|---|---|---|---|---|
| Speedway 15W-40 HD Diesel Motor Oil | Mixture | LD50 = 2.18 to >4 mg/l [Rat] | LD50 > 2 gm/kg [Rabbit] | LD50 > 5 ml/kg [Rat] |

**Toxicology Information:**

Based on data from components this product is considered to have a low order of acute oral and dermal toxicity. Chronic skin painting studies with severely solvent refined neutral oils did not produce evidence of skin cancer in mice.

This product contains approximately 0-1.5% of a zinc alkyl dithiophosphate (ZDDP) additive. ZDDP has been found to have weak mutagenic activity in cultured cells. Repeated dermal exposures of ZDDP produced severe skin irritation, significant weight loss and testicular atrophy in male rabbits but not male rats at high concentrations. Subsequent research showed that the testicular effect was due to the severe stress and weight loss as seen with other caustic materials and not a direct effect of ZDDP. The concentration of ZDDP in this product is significantly lower than exposure levels that produced these effects in rabbits.

Used motor oil applied to the skin of rabbits at doses of 8 ml/kg/day, 5 days/wk, for two weeks, produced significant weight loss and skin irritation but no mortality. Used motor oil was found to produce skin tumors in mice in lifetime skin painting studies. Solvent extracts of used motor oils were found to be positive in the Ames mutagenicity test.

## 12. ECOTOXICOLOGICAL INFORMATION

**Mobility:**

No data available.

**Ecotoxicity:**

No data available.

**Bioaccummulation:**

No data available.

**Persistance/Biodegradation:**

Water accomated fractions (WAF) of highly refined base oils did not produce acute toxicity in fish (100-1000 mg/l), fresh water algae (500 mg/l) or daphnia (10,000 mg/l) in 48-96 hour LC50 studies.

Used motor and/or lube oils can be toxic to birds and fish.

## 13. DISPOSAL CONSIDERATIONS

**Cleanup Considerations:**

This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. This material could become a hazardous waste if mixed or contaminated with a hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Don't pollute. Conserve resources. Send used product to recycling center. Dispose of cleanup materials in accordance with applicable local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**49 CFR 172.101:**

## 14. TRANSPORT INFORMATION

**DOT:**

**Transport Information:** This material when transported via US commerce is NOT REGULATED by DOT regulations.

**Packing group:** Not applicable.

**DOT reportable quantity (lbs):** Not applicable.

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: This product has been evaluated and determined not to be hazardous as defined in OSHA's Hazard Communication Standard.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product contains the following component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Distillates, Petroleum Solvent-Refined Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Dialkyl Dithiophosphate | NA |

**SARA Section 304:** This product contains the following component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| Distillates, Petroleum Solvent-Refined Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Dialkyl Dithiophosphate | NA |

**SARA Section 311/312** The following EPA hazard categories apply to this product:

None

**SARA Section 313:** This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) From R:

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Distillates, Petroleum Solvent-Refined Heavy Paraffinic | None |

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Additives | None |
| Zinc Dialkyl Dithiophosphate | = 1.0 % de minimis concentration |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Distillates, Petroleum Solvent-Refined Heavy Paraffinic

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | carcinogen |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Additives

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Zinc Dialkyl Dithiophosphate

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | sn 3012 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |

Distillates, Petroleum Solvent-Refined Heavy Paraffinic

| | |
|---|---|
| Michigan critical materials register list: | = 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | SN 3012 TPQ 500 lb (Category Code N982. Includes any unique chemical substance that contains the named metal as part of that chemical structure) |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

**Canadian Regulatory Information:**

Canada DSL/NDSL Inventory: This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

**NOTE:** Not Applicable.

## 16. OTHER INFORMATION

**Additional Information:** No data available.

**Prepared by:** Mark S. Swanson, Manager, Toxicology and Product Safety

The information and recommendations contained herein are based upon tests believed to be reliable. However, Speedway LLC does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform to actual conditions of usage maybe required. Speedway assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

**SDS ID NO.:** 0114SPE012
**Revision Date:** 05/18/2015

## 1. IDENTIFICATION

**Product Name:** Speedway No. 2 Low Sulfur Diesel 500 ppm Sulfur Max

**Synonym:** Diesel No. 2 500 ppm Sulfur Max; No. 2 Diesel, Motor Vehicle Use, Undyed; No. 2 Diesel 500 ppm Sulfur Max; No. 2 MV 500 Diesel; No. 2 Diesel (0.05% Sulfur Max)

**Chemical Family:** Complex Hydrocarbon Substance

**Recommended Use:** Fuel.
**Use Restrictions:** All others.

**Supplier Name and Address:**

**Speedway LLC**
**P.O. Box 1500**
**Enon, OH 45501**

**SDS information:** 1-419-421-3070

**Emergency Telephone:** 1-877-627-5463

## 2. HAZARD IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 3 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Carcinogenicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 2 |
| Aspiration toxicity | Category 1 |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

**Hazards Not Otherwise Classified (HNOC)**
Static accumulating flammable liquid

**Label elements**

**EMERGENCY OVERVIEW**

**Danger**

FLAMMABLE LIQUID AND VAPOR
May accumulate electrostatic charge and ignite or explode
May be fatal if swallowed and enters airways
Harmful if inhaled
Causes skin irritation
Suspected of causing cancer
May cause drowsiness or dizziness
May cause damage to organs (thymus, liver, bone marrow) through prolonged or repeated exposure
Toxic to aquatic life with long lasting effects

**Appearance** Clear or Amber Liquid **Physical State** Liquid **Odor** Slight Hydrocarbon

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Use explosion-proof electrical/ventilating/lighting/equipment
Take precautionary measures against static discharge
Do not breathe mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wear protective gloves/protective clothing/eye protection/face protection
Wash hands and any possibly exposed skin thoroughly after handling
Avoid release to the environment

**Precautionary Statements - Response**
IF exposed or concerned: Get medical attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use water spray, fog or regular foam for extinction
Collect spillage

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container at an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

No. 2 Diesel is a complex mixture of parafffins, cycloparaffins, olefins, and aromatic hydrocarbons having hydrocarbon chain lengths predominately in the range of eleven to twenty carbons. May contain a trace amount of benzene (<0.01%). May contain small amounts of dye and other additives (<0.15%) which are not considered hazardous at the concentrations used.

### Composition Information:

| Name | CAS Number | Weight % |
|---|---|---|
| No. 2 Diesel Fuel | 68476-34-6 | 50-100 |
| Kerosine, Petroleum | 8008-20-6 | 0-50 |
| Fuels, Diesel, C9-18-Alkane Branched and Linear | 1159170-26-9 | 0-5 |
| Alkanes, C10-C20 branched and linear | 928771-01-1 | 0-5 |
| Naphthalene | 91-20-3 | 0.01-0.5 |

## 4. FIRST AID MEASURES

**First Aid Measures**

**General advice** In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Inhalation:** Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Skin Contact:** Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. May be absorbed through the skin in harmful amounts. Get medical attention if irritation persists. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

**Eye Contact:** Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. GET IMMEDIATE MEDICAL ATTENTION.

**Ingestion:** Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Most important signs and symptoms, both short-term and delayed with overexposure**

**Adverse Effects:** Acute: Headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue. Delayed: Dry skin and possible irritation with repeated or prolonged exposure.

**Indication of any immediate medical attention and special treatment needed**

**NOTES TO PHYSICIAN:** SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Unsuitable extinguishing media**
Do not use straight water streams to avoid spreading fire.

**Specific hazards arising from the chemical**
This product has been determined to be a flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information, see NFPA 30 or the North American Emergency Response Guide 128.

**Hazardous combustion products**
Smoke, carbon monoxide, and other products of incomplete combustion.

**Explosion data**
**Sensitivity to Mechanical Impact** No.
**Sensitivity to Static Discharge** Yes.

**Special protective equipment and precautions for firefighters**
Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Keep surrounding area cool with water spray from a distance and prevent further ignition of combustible material. Keep run-off water out of sewers and water sources.

| **NFPA:** | Health 1 | Flammability 2 | Instability 0 | Special Hazards - |
|---|---|---|---|---|

## 6. ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal Precautions:** | Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources. All contaminated surfaces will be slippery. |
| **Protective Equipment:** | Use personal protection measures as recommended in Section 8. |
| **Emergency Procedures:** | Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate. |
| **Environmental precautions:** | Avoid release to the environment. Avoid subsoil penetration. |
| **Methods and materials for containment:** | Contain liquid with sand or soil. |
| **Methods and materials for cleaning up:** | Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and bonded. Use only non-sparking tools. |

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:**

NEVER SIPHON THIS PRODUCT BY MOUTH. Use appropriate grounding and bonding practices. Static accumulating flammable liquid. Bonding and grounding may be insufficient to eliminate the hazard from static electricity. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Use only non-sparking tools. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Hydrocarbons are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, pumping at high flow rates or loading and transfer operations. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic chemical vapors or mists from process equipment operating under elevated temperature and pressure, or sudden ingress of air into vacuum equipment may result in ignition of vapors or mists without the presence of obvious ignition sources. Nozzle spouts must be kept in contact with the containers or tank during the entire filling operation.

Portable containers should never be filled while in or on a motor vehicle or marine craft. Containers should be placed on the ground. Static electric discharge can ignite fuel vapors when filling non-grounded containers or vehicles on trailers. The nozzle spout must be kept in contact with the container before and during the entire filling operation. Use only approved containers.

A buildup of static electricity can occur upon re-entry into a vehicle during fueling especially in cold or dry climate conditions. The charge is generated by the action of dissimilar fabrics (i.e., clothing and upholstery) rubbing across each other as a person enters/exits the vehicle. A flash fire can result from this discharge if sufficient flammable vapors are present. Therefore, do not get back in your vehicle while refueling.

Cellular phones and other electronic devices may have the potential to emit electrical charges (sparks). Sparks in potentially explosive atmospheres (including fueling areas such as gas stations) could cause an explosion if sufficient flammable vapors are present. Therefore, turn off cellular phones and other electronic devices when working in potentially explosive atmospheres or keep devices inside your vehicle during refueling.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

**Storage Conditions:** Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | ACGIH TLV | OSHA PELS: | OSHA - Vacated PELs | NIOSH IDLH |
|---|---|---|---|---|
| No. 2 Diesel Fuel<br>68476-34-6 | 100 mg/m³ TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | - | - | - |
| Kerosine, Petroleum<br>8008-20-6 | 200 mg/m³ TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | - | - | - |

| | | | | |
|---|---|---|---|---|
| Fuels, Diesel, C9-18-Alkane Branched and Linear 1159170-26-9 | - | - | - | - |
| Alkanes, C10-C20 branched and linear 928771-01-1 | - | - | - | - |
| Naphthalene 91-20-3 | 10 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm<br>TWA: 50 mg/m$^3$ | 10 ppm TWA<br>50 mg/m$^3$ TWA<br>15 ppm STEL<br>75 mg/m$^3$ STEL | 250 ppm |

**Notes:** The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

**Engineering measures:** Local or general exhaust required in an enclosed area or with inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

**Personal protective equipment**

**Eye protection:** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection:** Wear neoprene, nitrile or PVA gloves to prevent skin contact. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

**Respiratory protection:** Use an approved organic vapor chemical cartridge or supplied air respirators when material produces vapors that exceed permissible exposure limits or excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Clear or Amber Liquid |
| **Color** | Clear or Amber |
| **Odor** | Slight Hydrocarbon |
| **Odor Threshold** | No available data. |

| **Property** | **Values (Method)** |
|---|---|
| **Melting Point / Freezing Point** | No available data. |
| **Initial Boiling Point / Boiling Range** | 204-338 °C / 400-640 °F |
| **Flash Point** | 54-88 °C / 130-190 °F |
| **Evaporation Rate** | No available data. |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammability Limit in Air (%)** | |
| **Upper Flammability Limit:** | 5.0 |
| **Lower Flammability Limit:** | 0.7 |
| **Vapor Pressure** | 1-10 mm Hg @ 20°C |
| **Vapor Density** | 4-5 |
| **Specific Gravity / Relative Density** | C.A. 0.8 |
| **Water Solubility** | No available data. |
| **Solubility in other solvents** | Negligible |
| **Partition Coefficient** | No available data. |
| **Decomposition temperature:** | No available data. |
| **pH:** | Not applicable |

| | |
|---|---|
| **Autoignition Temperature** | 254 °C / 489 °F |
| **Kinematic Viscosity** | 1.9-3.4 @ 40°C |
| **Dynamic Viscosity** | No available data. |
| **Explosive Properties** | No available data. |
| **Softening Point** | No available data. |
| **VOC Content (%)** | 10% |
| **Density** | 6.76 lbs/gal |
| **Bulk Density** | Not applicable. |

## 10. STABILITY AND REACTIVITY

**Reactivity** The product is non-reactive under normal conditions.

**Chemical stability** The material is stable at 70°F, 760 mmHg pressure.

**Possibility of hazardous reactions** None under normal processing.

**Hazardous polymerization** Will not occur.

**Conditions to avoid** Excessive heat, sources of ignition, open flame.

**Incompatible materials** Strong oxidizing agents.

**Hazardous decomposition products** None known under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

**Potential short-term adverse effects from overexposures**

**Inhalation** Harmful if inhaled. Inhalation of high vapor concentrations may cause irritation of the respiratory system. May cause drowsiness or dizziness.

**Eye contact** Causes mild eye irritation.

**Skin contact** Irritating to skin. Effects may become more serious with repeated or prolonged contact. May be absorbed through the skin in harmful amounts.

**Ingestion** May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

**Acute Toxicological data**

| Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| No. 2 Diesel Fuel<br>68476-34-6 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | >1 - <5 mg/L (Rat) 4 h |
| Kerosine, Petroleum<br>8008-20-6 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.28 mg/L (Rat) 4 h |
| Fuels, Diesel, C9-18-Alkane Branched and Linear<br>1159170-26-9 | - | - | >1 - <5 mg/l (Rat) 4 h |
| Alkanes, C10-C20 branched and linear<br>928771-01-1 | - | - | >1 - <5 mg/l (Rat) 4 h |
| Naphthalene<br>91-20-3 | 490 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 340 mg/m³ (Rat) 1 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

MIDDLE DISTILLATES, PETROLEUM: Long-term repeated (lifetime) skin exposure to similar materials has been reported to result in an increase in skin tumors in laboratory rodents. The relevance of these findings to humans is not clear at this time.

MIDDLE DISTILLATES WITH CRACKED STOCKS: Light cracked distillates have been shown to be carcinogenic in animal tests and have tested positive with in vitro genotoxicity tests. Repeated dermal exposures to high concentrations in test animals resulted in reduced litter size and litter weight, and increased fetal resorptions at maternally toxic doses. Dermal exposure to high concentrations resulted in severe skin irritation with weight loss and some mortality. Inhalation exposure to high concentrations resulted in respiratory tract irritation, lung changes/infiltration/accumulation, and reduction in lung function.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, in-depth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

NAPHTHALENE: Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from overexposure to naphthalene. Persons with glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have been reported in persons overexposed to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect. Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) in vitro. Naphthalene has been classified as Possibly Carcinogenic to Humans (2B) by IARC, based on findings from studies in laboratory animals.

DIESEL EXHAUST: The combustion of diesel fuels produces gases including carbon monoxide, carbon dioxide, oxides of nitrogen and/or sulfur, and hydrocarbons that can be irritating and hazardous with overexposure. Long-term occupational overexposure to diesel exhaust and diesel exhaust particulate matter has been associated with an increased risk of respiratory disease, including lung cancer, and is characterized as a “known human carcinogen” by the International Agency for Research on Cancer (IARC), as “a reasonably anticipated human carcinogen” by the National Toxicology Program, and as “likely to be carcinogenic to humans” by the EPA, based upon animal and occupational exposure studies. However, uncertainty exists with these classifications because of deficiencies in the supporting occupational exposure/epidemiology studies, including reliable exposure estimates. Lifetime animal inhalation studies with pulmonary overloading exposure concentrations of diesel exhaust emissions have produced tumors and other adverse health effects. However, in more recent long-term animal inhalation studies of diesel exhaust emissions, no increase in tumor incidence and in fact a substantial reduction in adverse health effects along with significant reductions in the levels of hazardous material emissions were observed and are associated with fuel composition alterations coupled with new technology diesel engines.

**Adverse effects related to the physical, chemical and toxicological characteristics**

**Signs & Symptoms** Nausea, vomiting, signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.

**Sensitization** Not expected to be a skin or respiratory sensitizer.

**Mutagenic effects** None known.

**Carcinogenicity** Cancer designations are listed in the table below.

| Name | ACGIH (Class) | IARC (Class) | NTP | OSHA |
|---|---|---|---|---|
| No. 2 Diesel Fuel 68476-34-6 | Confirmed animal carcinogen (A3) | Not Classifiable (3) | Not Listed | Not Listed |
| Kerosine, Petroleum 8008-20-6 | Confirmed animal carcinogen (A3) | Not Classifiable (3) | Not Listed | Not Listed |
| Fuels, Diesel, C9-18-Alkane Branched and Linear 1159170-26-9 | Not Listed | Not Listed | Not Listed | Not Listed |
| Alkanes, C10-C20 branched and linear 928771-01-1 | Not Listed | Not Listed | Not Listed | Not Listed |
| Naphthalene 91-20-3 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not Listed |

**Reproductive toxicity** None known.

**Specific Target Organ Toxicity (STOT) - single exposure** Central nervous system.

**Specific Target Organ Toxicity (STOT) - repeated exposure** Thymus. Liver. Bone marrow.

**Aspiration hazard** May be fatal if swallowed or vomited and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product should be considered toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

| Name | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|---|---|---|---|---|
| No. 2 Diesel Fuel 68476-34-6 | - | 96-hr LC50 = 35 mg/l Fathead minnow (flow-through) | - | 48-hr EL50 = 6.4 mg/l Daphnia magna |
| Kerosine, Petroleum 8008-20-6 | 72-hr EL50 = 5.0-11 mg/l Algae | 96-hr LL50 = 18-25 mg/l Fish | - | 48-hr EL50 = 1.4-21 mg/l Invertebrates |
| Fuels, Diesel, C9-18-Alkane Branched and Linear 1159170-26-9 | - | - | - | - |
| Alkanes, C10-C20 branched and linear 928771-01-1 | - | - | - | - |
| Naphthalene 91-20-3 | - | 96-hr LC50 = 0.91-2.82 mg/l Rainbow trout (static) 96-hr LC50 = 1.99 mg/l Fathead minnow (static) | - | 48-hr LC50 = 1.6 mg/l Daphnia magna |

**Persistence and degradability** Expected to be inherently biodegradable.

**Bioaccummulation** Has the potential to bioaccumulate.

**Mobility in soil** May partition into air, soil and water.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Description of Waste Residues**
This material may be a flammable liquid waste.

**Safe Handling of Wastes**
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking.

**Disposal of Wastes / Methods of Disposal**
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

**Methods of Contaminated Packaging Disposal**
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT (49 CFR 172.101):**

| | |
|---|---|
| **UN Proper shipping name:** | Fuel Oil, No. 2 |
| **UN/Identification No:** | NA 1993 |
| **Transport Hazard Class(es):** | 3 |
| **Packing group:** | III |

**TDG (Canada):**

| | |
|---|---|
| **UN Proper shipping name:** | Fuel Oil, No. 2 |
| **UN/Identification No:** | NA 1993 |
| **Transport Hazard Class(es):** | 3 |
| **Packing group:** | III |

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List.

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| No. 2 Diesel Fuel | NA |
| Kerosine, Petroleum | NA |
| Fuels, Diesel, C9-18-Alkane Branched and Linear | NA |
| Alkanes, C10-C20 branched and linear | NA |
| Naphthalene | NA |

**SARA Section 304:** This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| No. 2 Diesel Fuel | NA |
| Kerosine, Petroleum | NA |
| Fuels, Diesel, C9-18-Alkane Branched and Linear | NA |
| Alkanes, C10-C20 branched and linear | NA |

| | |
|---|---|
| Naphthalene | 100 lb final RQ<br>45.4 kg final RQ |

**SARA:** The following EPA hazard categories apply to this product:

Acute Health Hazard
Fire Hazard
Chronic Health Hazard

**SARA Section 313:** This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| No. 2 Diesel Fuel | None |
| Kerosine, Petroleum | None |
| Fuels, Diesel, C9-18-Alkane Branched and Linear | None |
| Alkanes, C10-C20 branched and linear | None |
| Naphthalene | 0.1 % de minimis concentration |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

No. 2 Diesel Fuel

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 2444 |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed. |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Not Listed. |
| New Jersey - Environmental Hazardous Substances List: | SN 2444 TPQ: 10000 lb (Under N.J.A.C. 7:1G, environmental hazardous substances in mixtures such as gasoline or new and used petroleum oil may be reported under these categories) |
| Illinois - Toxic Air Contaminants | Not Listed. |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Kerosine, Petroleum

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 1091 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed. |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Not Listed. |
| New Jersey - Environmental Hazardous Substances List: | SN 1091 TPQ: 10000 lb (Under N.J.A.C. 7:1G, environmental hazardous substances in mixtures such as gasoline or new and used petroleum oil may be reported under these categories) |
| Illinois - Toxic Air Contaminants | Not Listed. |

| | |
|---|---|
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Fuels, Diesel, C9-18-Alkane Branched and Linear

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed. |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Not Listed. |
| New Jersey - Environmental Hazardous Substances List: | Not Listed. |
| Illinois - Toxic Air Contaminants | Not Listed. |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Alkanes, C10-C20 branched and linear

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed. |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Not Listed. |
| New Jersey - Environmental Hazardous Substances List: | Not Listed. |
| Illinois - Toxic Air Contaminants | Not Listed. |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Naphthalene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Carcinogen, initial date 4/19/02 |
| New Jersey Right-To-Know: | SN 1322 SN 3758 |
| Pennsylvania Right-To-Know: | Environmental hazard Present (particulate) |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Carcinogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1322 TPQ: 500 lb (Reportable at the de minimis quantity of >0.1%) |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 100 lb RQ (air); 1 lb RQ (land/water) |

**Canada DSL/NDSL Inventory:** This product contains the following component(s) that are listed on the Non-Domestic Substance List (NDSL): CAS# 1159170-26-9

**Canadian Regulatory Information:** "This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations."

| Name | Canada - WHMIS: Classifications of Substances: | Canada - WHMIS: Ingredient Disclosure: |
|---|---|---|
| No. 2 Diesel Fuel | B3,D2A,D2B | 0.1% |
| Kerosine, Petroleum | B3,D2B | 1% |
| Fuels, Diesel, C9-18-Alkane Branched and Linear | B3,D2A,D2B | 0.1% |
| Alkanes, C10-C20 branched and linear | B3,D2A,D2B | 0.1% |
| Naphthalene | B4,D2A | 0.1% |

**NOTE:** Not Applicable.

## 16. OTHER INFORMATION

**Prepared By** Toxicology and Product Safety
**Revision Date:** 05/18/2015

**Revision Note:**
**Disclaimer**
**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

# SAFETY DATA SHEET

**SDS ID NO.:** 0110SPE012
**Revision Date:** 05/18/2015

## 1. IDENTIFICATION

**Product Name:** Speedway Regular Unleaded Gasoline With Ethanol

**Synonym:** Regular Unleaded Gasoline With Alcohol
**Chemical Family:** Complex Hydrocarbon Substance

**Recommended Use:** Fuel.
**Use Restrictions:** All others.

**Supplier Name and Address:**

**Speedway LLC**
**P.O. Box 1500**
**Enon, OH 45501**

**SDS information:** 1-419-421-3070

**Emergency Telephone:** 1-877-627-5463

## 2. HAZARD IDENTIFICATION

**Classification**

**OSHA Regulatory Status**
This chemical is considered hazardous according to the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|---|---|
| Flammable liquids | Category 1 |
| Skin corrosion/irritation | Category 2 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |
| Reproductive toxicity | Category 2 |
| Specific target organ toxicity (single exposure) | Category 3 |
| Aspiration toxicity | Category 1 |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

**Hazards Not Otherwise Classified (HNOC)**
Static accumulating flammable liquid

**Label elements**

**EMERGENCY OVERVIEW**

**Danger**

EXTREMELY FLAMMABLE LIQUID AND VAPOR
May accumulate electrostatic charge and ignite or explode

May be fatal if swallowed and enters airways
Causes skin irritation
May cause respiratory irritation
May cause drowsiness or dizziness
May cause genetic defects
May cause cancer
Suspected of damaging fertility or the unborn child
Toxic to aquatic life with long lasting effects

**Appearance** Clear or Colored Liquid **Physical State** Liquid **Odor** Strong Hydrocarbon

**Precautionary Statements - Prevention**
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Do not eat, drink or smoke when using this product
Do not breathe mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash hands thoroughly after handling
Avoid release to the environment

**Precautionary Statements - Response**
IF exposed or concerned: Get medical attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation occurs: Get medical attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor if you feel unwell
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use water spray, fog or regular foam for extinction
Collect spillage

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep container tightly closed
Keep cool
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container at an approved waste disposal plant

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Gasoline is a complex combination of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons having molecular chains ranging in length from four to ten carbons. May contain small amounts of dye and other additives (>0.02%) which are not considered hazardous at the concentrations used.

### Composition Information:

| Name | CAS Number | Weight % |
|---|---|---|
| Gasoline | 86290-81-5 | 100 |
| Toluene | 108-88-3 | 0.9-13.5 |
| Ethyl Alcohol | 64-17-5 | 5.7-10 |
| Xylene (mixed isomers) | 1330-20-7 | 1.8-9 |
| 1,2,4 Trimethylbenzene | 95-63-6 | 0.9-4.5 |
| Benzene | 71-43-2 | 0.45-3.2 |
| n-Hexane | 110-54-3 | 0-2.7 |
| Ethylbenzene | 100-41-4 | 0.45-1.8 |
| Naphthalene | 91-20-3 | 0.1-0.5 |

## 4. FIRST AID MEASURES

**First Aid Measures**

**General advice** In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Inhalation:** Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Skin Contact:** Immediately wash exposed skin with plenty of soap and water while removing contaminated clothing and shoes. May be absorbed through the skin in harmful amounts. Get medical attention if irritation persists. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

Place contaminated clothing in closed container until cleaned or discarded. If clothing is to be laundered, inform the person performing the operation of contaminant's hazardous properties. Destroy contaminated, non-chemical resistant footwear.

**Eye Contact:** Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

**Ingestion:** Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION.

**Most important signs and symptoms, both short-term and delayed with overexposure**

**Adverse Effects:** Acute: Headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.
Delayed: Dry skin and possible irritation with repeated or prolonged exposure.

**Indication of any immediate medical attention and special treatment needed**

**NOTES TO PHYSICIAN:**

INHALATION: This material (or a component) sensitizes the myocardium to the effects of sympathomimetic amines. Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in individuals exposed to this material. Administration of sympathomimetic drugs should be avoided.

SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

INGESTION: This material represents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**
For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Unsuitable extinguishing media**
Do not use straight water streams to avoid spreading fire.

**Specific hazards arising from the chemical**
This product has been determined to be an extremely flammable liquid per the OSHA Hazard Communication Standard and should be handled accordingly. May accumulate electrostatic charge and ignite or explode. Vapors may travel along the ground or be moved by ventilation and ignited by many sources such as pilot lights, sparks, electric motors, static discharge, or other ignition sources at locations distant from material handling. Flashback can occur along vapor trail. For additional fire related information, see NFPA 30 or the North American Emergency Response Guide 128.

**Hazardous combustion products**
Smoke, carbon monoxide, and other products of incomplete combustion.

**Explosion data**
**Sensitivity to Mechanical Impact** No.
**Sensitivity to Static Discharge** Yes.

**Special protective equipment and precautions for firefighters**
Firefighters should wear full protective clothing and positive-pressure self-contained breathing apparatus (SCBA) with a full face-piece, as appropriate. Avoid using straight water streams. Water may be ineffective in extinguishing low flash point fires, but can be used to cool exposed surfaces. Avoid excessive water spray application. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Keep run-off water out of sewers and water sources.

| **NFPA:** | Health 1 | Flammability 3 | Instability 0 | Special Hazards - |
|---|---|---|---|---|

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Eliminate all ignition sources.

**Protective Equipment:** Use personal protection measures as recommended in Section 8.

**Emergency Procedures:** Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

| | |
|---|---|
| **Environmental precautions:** | Ethanol in gasoline phase seperates in contact with water. Monitor downstream for dissolved ethanol or other appropriate indicators. Avoid release to the environment. Avoid subsoil penetration. |
| **Methods and materials for containment:** | Contain liquid with sand or soil. |
| **Methods and materials for cleaning up:** | Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers. When recovering free liquids ensure all equipment is grounded and bonded. Use only non-sparking tools. |

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:**

NEVER SIPHON THIS PRODUCT BY MOUTH. Use appropriate grounding and bonding practices. Static accumulating flammable liquid. Bonding and grounding may be insufficient to eliminate the hazard from static electricity. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking. Avoid repeated and prolonged skin contact. Use personal protection measures as recommended in Section 8. Use only non-sparking tools. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

Hydrocarbons are basically non-conductors of electricity and can become electrostatically charged during mixing, filtering, pumping at high flow rates or loading and transfer operations. If this charge reaches a sufficiently high level, sparks can form that may ignite the vapors of flammable liquids. Sudden release of hot organic chemical vapors or mists from process equipment operating under elevated temperature and pressure, or sudden ingress of air into vacuum equipment may result in ignition of vapors or mists without the presence of obvious ignition sources. Nozzle spouts must be kept in contact with the containers or tank during the entire filling operation.

Portable containers should never be filled while in or on a motor vehicle or marine craft. Containers should be placed on the ground. Static electric discharge can ignite fuel vapors when filling non-grounded containers or vehicles on trailers. The nozzle spout must be kept in contact with the container before and during the entire filling operation. Use only approved containers.

A buildup of static electricity can occur upon re-entry into a vehicle during fueling especially in cold or dry climate conditions. The charge is generated by the action of dissimilar fabrics (i.e., clothing and upholstery) rubbing across each other as a person enters/exits the vehicle. A flash fire can result from this discharge if sufficient flammable vapors are present. Therefore, do not get back in your vehicle while refueling.

Cellular phones and other electronic devices may have the potential to emit electrical charges (sparks). Sparks in potentially explosive atmospheres (including fueling areas such as gas stations) could cause an explosion if sufficient flammable vapors are present. Therefore, turn off cellular phones and other electronic devices when working in potentially explosive atmospheres or keep devices inside your vehicle during refueling.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

| | |
|---|---|
| **Storage Conditions:** | Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. |
| **Incompatible materials** | Strong oxidizing agents. |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Name | ACGIH TLV | OSHA PELS: | OSHA - Vacated PELs | NIOSH IDLH |
|---|---|---|---|---|
| Gasoline<br>86290-81-5 | 300 ppm TWA<br>500 ppm STEL | - | 300 ppm TWA<br>900 mg/m³ TWA<br>500 ppm STEL<br>1500 mg/m³ STEL | - |
| Toluene<br>108-88-3 | 20 ppm TWA | TWA: 200 ppm<br>Ceiling: 300 ppm | 100 ppm TWA<br>375 mg/m³ TWA<br>150 ppm STEL<br>560 mg/m³ STEL | 500 ppm |
| Ethyl Alcohol<br>64-17-5 | 1000 ppm STEL | TWA: 1000 ppm<br>TWA: 1900 mg/m³ | 1000 ppm TWA<br>1900 mg/m³ TWA | 3300 ppm |
| Xylene (mixed isomers)<br>1330-20-7 | 100 ppm TWA<br>150 ppm STEL | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>150 ppm STEL<br>655 mg/m³ STEL | 900 ppm |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 25 ppm TWA | - | 25 ppm TWA<br>125 mg/m³ TWA | - |
| Benzene<br>71-43-2 | 0.5 ppm TWA<br>2.5 ppm STEL<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm (applies to industry segments exempt from the benzene standard at 29 CFR 1910.1028)<br>TWA: 1 ppm<br>STEL: 5 ppm<br>(see 29 CFR 1910.1028) | 25 ppm Ceiling<br>1 ppm TWA<br>5 ppm STEL | 500 ppm |
| n-Hexane<br>110-54-3 | 50 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 500 ppm<br>TWA: 1800 mg/m³ | 50 ppm TWA<br>180 mg/m³ TWA | 1100 ppm |
| Ethylbenzene<br>100-41-4 | 20 ppm TWA | TWA: 100 ppm<br>TWA: 435 mg/m³ | 100 ppm TWA<br>435 mg/m³ TWA<br>125 ppm STEL<br>545 mg/m³ STEL | 800 ppm |
| Naphthalene<br>91-20-3 | 10 ppm TWA<br>Skin - potential significant contribution to overall exposure by the cutaneous route | TWA: 10 ppm<br>TWA: 50 mg/m³ | 10 ppm TWA<br>50 mg/m³ TWA<br>15 ppm STEL<br>75 mg/m³ STEL | 250 ppm |

**Notes:** The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

**Engineering measures:** Local or general exhaust required in an enclosed area or when there is inadequate ventilation. Use mechanical ventilation equipment that is explosion-proof.

**Personal protective equipment**

**Eye protection:** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection:** Use nitrile rubber, viton or PVA gloves for repeated or prolonged skin exposure. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times.

**Respiratory protection:** Approved organic vapor chemical cartridge or supplied air respirators should be worn for exposures to any components exceeding the established exposure limits. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

| | |
|---|---|
| **Physical State** | Liquid |
| **Appearance** | Clear or Colored Liquid |
| **Color** | Clear or Colored |
| **Odor** | Strong Hydrocarbon |
| **Odor Threshold** | No available data. |

| **Property** | **Values (Method)** |
|---|---|
| **Melting Point / Freezing Point** | No available data. |
| **Initial Boiling Point / Boiling Range** | 32-225 °C / 90-437 °F |
| **Flash Point** | -45.5 °C / -50 °F |
| **Evaporation Rate** | No available data. |
| **Flammability (solid, gas)** | Not applicable. |
| **Flammability Limit in Air (%)** | |
| **Upper Flammability Limit:** | 7.6 |
| **Lower Flammability Limit:** | 1.4 |
| **Vapor Pressure** | 403-776 mm Hg@ 100°F |
| **Vapor Density** | 3-4 |
| **Specific Gravity / Relative Density** | 0.70-0.77 |
| **Water Solubility** | Negligible |
| **Solubility in other solvents** | No available data. |
| **Partition Coefficient** | 2.13-4.5 |
| **Decomposition temperature:** | No available data. |
| **pH:** | Not applicable |
| **Autoignition Temperature** | C.A. 257 °C / 495 °F |
| **Kinematic Viscosity** | No available data. |
| **Dynamic Viscosity** | No available data. |
| **Explosive Properties** | No available data. |
| **Softening Point** | No available data. |
| **VOC Content (%)** | 100% |
| **Density** | 5.9-6.3 lbs/gal |
| **Bulk Density** | Not applicable. |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Reactivity** | The product is non-reactive under normal conditions. |
| **Chemical stability** | The material is stable at 70°F, 760 mmHg pressure. |
| **Possibility of hazardous reactions** | None under normal processing. |
| **Hazardous polymerization** | Will not occur. |
| **Conditions to avoid** | Excessive heat, sources of ignition, open flame. |
| **Incompatible materials** | Strong oxidizing agents. |
| **Hazardous decomposition products** | None known under normal conditions of use. |

## 11. TOXICOLOGICAL INFORMATION

**Potential short-term adverse effects from overexposures**

**Inhalation** Irritating to the respiratory system. May cause drowsiness or dizziness. Breathing high concentrations of this material in a confined space or by intentional abuse can cause irregular heartbeats which can cause death.

**Eye contact** Causes mild eye irritation.

**Skin contact** Causes skin irritation. Effects may become more serious with repeated or prolonged contact. May be absorbed through the skin in harmful amounts.

**Ingestion** May be fatal if swallowed or vomited and enters airways. May cause irritation of the mouth, throat and gastrointestinal tract.

**Acute Toxicological data**

| Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Gasoline<br>86290-81-5 | 14000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.2 mg/L (Rat) 4 h |
| Toluene<br>108-88-3 | > 2000 mg/kg (Rat) | 8390 mg/kg (Rabbit) | 12.5 mg/L (Rat) 4 h |
| Ethyl Alcohol<br>64-17-5 | > 5000 mg/kg (Rat) | - | 124.7 mg/L (Rat) 4 h |
| Xylene (mixed isomers)<br>1330-20-7 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 5.04 mg/L (Rat) 4 h |
| 1,2,4 Trimethylbenzene<br>95-63-6 | 3280 mg/kg (Rat) | > 3160 mg/kg (Rabbit) | 18,000 mg/m$^3$ (Rat) 4 h |
| Benzene<br>71-43-2 | > 2000 mg/kg (Rat) | > 5000 mg/kg (Rabbit) | > 20 mg/l (Rat) 4 h |
| n-Hexane<br>110-54-3 | 15000 mg/kg (Rat) | 3000 mg/kg (Rabbit) | 48000 ppm (Rat) 4 h |
| Ethylbenzene<br>100-41-4 | > 2000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | 17.2 mg/L (Rat) 4 h |
| Naphthalene<br>91-20-3 | 490 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | > 340 mg/m$^3$ (Rat) 1 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Altered mental state, drowsiness, peripheral motor neuropathy, irreversible brain damage (so-called Petrol Sniffer's Encephalopathy), delirium, seizures, and sudden death have been reported from repeated overexposure to some hydrocarbon solvents, naphthas, and gasoline.

BENZENE: Studies of workers exposed to benzene show clear evidence that overexposure can cause cancer and other diseases of the blood forming organs including Acute Myelogenous Leukemia (AML), and Aplastic Anemia (AA), an often fatal disease. Some studies suggest overexposure to benzene may also be associated with Myelodysplastic Syndrome (MDS). Findings from a case control study of workers exposed to benzene was reported during the 2009 Benzene Symposium in Munich included an increase in Acute Myeloid Leukemias and Non-Hodgkins Lymphoid Neoplasms (NHLN) of the subtype follicular lymphoma (FL) in some occupational categories. Some studies of workers exposed to benzene have shown an association with increased rates of chromosome aberrations in circulating lymphocytes. One study of women workers exposed to benzene suggested a weak association with irregular menstruation. However, other studies of workers exposed to benzene have not demonstrated clear evidence of an effect on fertility or reproductive outcome in humans. Benzene can cross the placenta and affect the developing fetus. Cases of AA have been reported in the offspring of persons severely overexposed to benzene. Studies in laboratory animals indicate that prolonged, repeated exposure to high levels of benzene vapor can cause bone marrow suppression and cancer in multiple organ systems. Studies in laboratory animals show evidence of adverse effects on male reproductive organs following high levels of exposure but no significant effects on reproduction have been observed. Embryotoxicity has been reported in studies of laboratory animals but effects were limited to reduced fetal weight and minor skeletal variations. Benzene has been classified as a proven human carcinogen by OSHA and a Group 1 (Carcinogenic to Humans) material by IARC. The current proposed IARC classification for benzene is summarized as follows: Sufficient evidence for Acute Myeloid Leukemia; limited evidence for Acute Lymphatic Leukemia, Chronic Lymphatic Leukemia, Non-Hodgkin Lymphoma, and Multiple Myeloma.

NAPHTHAS: In a large epidemiological study on over 15,000 employees at several petroleum refineries and amongst residents located near these refineries, no increased risk of kidney cancer was observed in association with gasoline exposures (a similar material). In a similar study, no increased risk of kidney cancer was observed among petroleum refinery workers, but there was a slight trend in the incidence of kidney cancers among service station employees, especially after a 30-year latency period.

ISOPARAFFINS: Studies in laboratory animals have shown that long-term exposure to similar materials (isoparaffins) can cause kidney damage and kidney cancer in male laboratory rats. However, in-depth research indicates that these findings are unique to the male rat, and that these effects are not relevant to humans.

TOLUENE: Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Abuse of toluene at high concentrations (e.g., glue sniffing and solvent abuse) has been associated with adverse effects on the liver, kidney and nervous system, and can cause CNS depression, cardiac arrhythmias, and death. Studies of workers indicate longterm exposure may be related to impaired color vision and hearing. Some studies of workers suggest longterm exposure may be related to neurobehavioral and cognitive changes. Some of these effects have been observed in laboratory animals following repeated exposure to high levels of toluene. Several studies of workers suggest longterm exposure may be related to small increases in spontaneous abortions and changes in some gonadotropic hormones. However, the weight of evidence does not indicate toluene is a reproductive hazard to humans. Studies in laboratory animals indicate some changes in reproductive organs following high levels of exposure, but no significant effects on mating performance or reproduction were observed. Case studies of persons abusing toluene suggest isolated incidences of adverse effects on the fetus including birth defects. Findings in laboratory animals have been largely negative. Positive findings include small increases in minor skeletal and visceral malformations and developmental delays following very high levels of maternal exposure. Studies of workers indicate long-term exposure may be related to effects on the liver, kidney and blood, but

these appear to be limited to changes in serum enzymes and decreased leukocyte counts. Adverse effects on the liver, kidney, thymus and nervous system were observed in animal studies following very high levels of exposure. The relevance of these findings to humans is not clear at this time.

ETHYLBENZENE: Findings from a 2-year inhalation study in rodents conducted by NTP were as follows: Effects were observed only at the highest exposure level (750 ppm). At this level the incidence of renal tumors was elevated in male rats (tubular carcinomas) and female rats (tubular adenomas). The incidence of tumors was also elevated in male mice (alveolar and bronchiolar carcinomas) and female mice (hepatocellular carcinomas). IARC has classified ethyl benzene as "possibly carcinogenic to humans" (Group 2B). Studies in laboratory animals indicate some evidence of post-implantation deaths following high levels of maternal exposure. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals indicate limited evidence of renal malformations, resorptions, and developmental delays following high levels of maternal exposure with evidence of maternal toxicity. The relevance of these findings to humans is not clear at this time. Studies in laboratory animals have demonstrated evidence of ototoxicity (hearing loss) following exposure levels as low as 300 ppm for 5 days. Studies in laboratory animals indicate some evidence of adverse effects on the liver, kidney, thyroid, and pituitary gland.

XYLENES, ALL ISOMERS: Overexposure to xylene may cause upper respiratory tract irritation, headache, cyanosis, blood serum changes, nervous system damage and narcosis. Effects may be increased by the use of alcoholic beverages. Evidence of liver and kidney impairment were reported in workers recovering from a gross overexposure. Effects from Prolonged or Repeated Exposure: Impaired neurological function was reported in workers exposed to solvents including xylene. Studies in laboratory animals have shown evidence of impaired hearing following high levels of exposure. Studies in laboratory animals suggest some changes in reproductive organs following high levels of exposure but no significant effects on reproduction were observed. Studies in laboratory animals indicate skeletal and visceral malformations, developmental delays, and increased fetal resorptions following extremely high levels of maternal exposure with evidence of maternal toxicity. The relevance of these observations to humans is not clear at this time. Adverse effects on the liver, kidney, bone marrow (changes in blood cell parameters) were observed in laboratory animals following high levels of exposure. The relevance of these observations to humans is not clear at this time.

C9 AROMATIC HYDROCARBONS: A developmental inhalation study was conducted in laboratory mice. Increased implantation losses, reduced fetal weights, delayed ossification and an increased incidence of cleft palate were observed at the highest exposure level (1,500 ppm). This exposure level was extremely toxic to pregnant female mice (44% mortality). Reduced fetal body weights were also observed at 500 ppm. A multi-generation reproduction inhalation study was conducted in laboratory rats. Reductions in pup weights, pup weight gain, litter size, and pup survival were observed at 1,500 ppm, an exposure level at which significant maternal toxicity was observed. Reduced pup weight gain was also observed at 500 ppm.

NAPHTHALENE: Severe jaundice, neurotoxicity (kernicterus) and fatalities have been reported in young children and infants as a result of hemolytic anemia from overexposure to naphthalene. Persons with glucose 6-phosphate dehydrogenase (G6PD) deficiency are more prone to the hemolytic effects of naphthalene. Adverse effects on the kidney have been reported in persons overexposed to naphthalene but these effects are believed to be a consequence of hemolytic anemia, and not a direct effect. Hemolytic anemia has been observed in laboratory animals exposed to naphthalene. Laboratory rodents exposed to naphthalene vapor for 2 years (lifetime studies) developed non-neoplastic and neoplastic tumors and inflammatory lesions of the nasal and respiratory tract. Cataracts and other adverse effects on the eye have been observed in laboratory animals exposed to high levels of naphthalene. Findings from a large number of bacterial and mammalian cell mutation assays have been negative. A few studies have shown chromosomal effects (elevated levels of Sister Chromatid Exchange or chromosomal aberrations) in vitro. Naphthalene has been classified as Possibly Carcinogenic to Humans (2B) by IARC, based on findings from studies in laboratory animals.

N-HEXANE: Long-term or repeated exposure to n-hexane can cause peripheral nerve damage. Initial symptoms are numbness of the fingers and toes. Also, motor weakness can occur in the digits, but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. Testicular atrophy and partial to full loss of the germ cell line were observed in sub-chronic high-dose inhalation studies of laboratory rodents. These effects appeared irreversible. Rodent reproduction studies have shown evidence of reduced fetal weight but no frank malformations.

PENTANES: Studies of pentane isomers in laboratory animals indicate exposure to extremely high levels (roughly 10 vol.%) may induce cardiac arrhythmias (irregular heartbeats) which may be serious or fatal.

ETHANOL: Repeated ingestion of ethanol can result in alcohol abuse, causing behavioral changes, memory loss, impaired judgement, decreased appetite, irregular heartbeats, and decreased fertility. Prolonged and repeated ingestion of ethanol has also been associated with cancers of the mouth, pharynx, esophagus and liver. Ethanol ingestion by pregnant women can cause miscarriage, low birth weight, premature birth and fetal alcohol syndrome. In males, acute and chronic alcohol ingestion may affect gonadal hormone levels. It may also affect the liver, kidney, brain, blood and cardiovascular system.

CARBON MONOXIDE: is a chemical asphyxiant with no warning properties (such as odor). At 400-500 ppm for 1 hour headache and dyspnea may occur. If activity is increased, symptoms of overexposure may include nausea, irritability, increased respiration, tinnitus, sweating, chest pain, confusion, impaired judgement, dizziness, weakness, drowsiness, ataxia, irregular heart beat, cyanosis and pallor. Levels in excess of 1000 ppm can result in collapse, loss of conciousness, respiratory failure and death. Extremely high concentrations (12,800 ppm) can cause immediate unconsciousness and death in 1-3 minutes. Repeated anoxia can lead to central nervous system damage and peripheral neuropathy, with loss of sensation in the fingers, amnesia, and mental deterioration and possible congestive heart failure. Damage may also occur to the fetus, lung, liver, kidney, spleen, cardiovascular system and other organs.

COMBUSTION ENGINE EXHAUST: Chronic inhalation studies of gasoline engine exhaust in mice, rats and hamsters did not produce any carcinogenic effects. Condensates/extracts of gasoline engine exhaust produced an increase in tumors compared to controls when testing by skin painting, subcutaneous injection, intratracheal instillation or implantation into the lungs.

**Adverse effects related to the physical, chemical and toxicological characteristics**

**Signs & Symptoms** Nausea, vomiting, signs of nervous system depression: headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.

**Sensitization** Not expected to be a skin or respiratory sensitizer.

**Mutagenic effects** May cause genetic defects.

**Carcinogenicity** Cancer designations are listed in the table below.

| Name | ACGIH (Class) | IARC (Class) | NTP | OSHA |
|---|---|---|---|---|
| Gasoline 86290-81-5 | Confirmed animal carcinogen (A3) | Possibly Carcinogenic (2B) | Not Listed | Not Listed |
| Toluene 108-88-3 | Not Classifiable (A4) | Not Classifiable (3) | Not Listed | Not Listed |
| Ethyl Alcohol 64-17-5 | Confirmed animal carcinogen (A3) | Carcinogenic (1) Alcoholic Beverages | Known to be human carcinogen - Alcoholic Beverage Consumption | Not Listed |
| Xylene (mixed isomers) 1330-20-7 | Not Classifiable (A4) | Not Classifiable (3) | Not Listed | Not Listed |

| | | | | |
|---|---|---|---|---|
| 1,2,4 Trimethylbenzene 95-63-6 | Not Listed | Not Listed | Not Listed | Not Listed |
| Benzene 71-43-2 | Confirmed human carcinogen (A1) | Carcinogenic to humans (1) | Known to be human carcinogen | Known carcinogen |
| n-Hexane 110-54-3 | Not Listed | Not Listed | Not Listed | Not Listed |
| Ethylbenzene 100-41-4 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Not Listed | Not Listed |
| Naphthalene 91-20-3 | Confirmed animal carcinogen (A3) | Possible human carcinogen (2B) | Reasonably anticipated to be a human carcinogen | Not Listed |

**Reproductive toxicity** Suspected of damaging fertility or the unborn child.

**Specific Target Organ Toxicity (STOT) - single exposure** Respiratory system. Central nervous system.

**Specific Target Organ Toxicity (STOT) - repeated exposure** Not classified.

**Aspiration hazard** May be fatal if swallowed or vomited and enters airways.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** This product should be considered toxic to aquatic organisms, with the potential to cause long lasting adverse effects in the aquatic environment.

| Name | Algae/aquatic plants | Fish | Toxicity to Microorganisms | Crustacea |
|---|---|---|---|---|
| Gasoline 86290-81-5 | 72-hr EC50 = 56 mg/l Algae | 96-hr LC50 = 11 mg/l Rainbow trout (static) | - | 48-hr LC50 = 7.6 mg/l Daphnia magna |
| Toluene 108-88-3 | 72-hr EC50 = 12.5 mg/l Algae | 96-hr LC50 <= 10 mg/l Rainbow trout | - | 48-hr EC50 = 5.46-9.83 mg/l Daphnia magna 48-hr EC50 = 11.5 mg/l Daphnia magna (Static) |
| Ethyl Alcohol 64-17-5 | - | 96-hr LC50 >1,000 mg/l Rainbow Trout (static) 96-hr LC50 >100 mg/l Fathead minnow (static) | - | 48-hr LC50 >1,000 mg/l Daphnia magna |
| Xylene (mixed isomers) 1330-20-7 | 72-hr EC50 = 11 mg/l Algae | 96-hr LC50 = 8 mg/l Rainbow trout | - | 48-hr LC50 = 3.82 mg/l Daphnia magna |
| 1,2,4 Trimethylbenzene 95-63-6 | - | 96-hr LC50 = 7.19-8.28 mg/l Fathead minnow (flow-through) | - | 48-hr EC50 = 6.14 mg/L Daphnia magna |
| Benzene 71-43-2 | 72-hr EC50 = 29 mg/l Algae | 96-hr LC50 = 5.3 mg/l Rainbow trout (flow-through) | - | 48-hr EC50 = 8.76-15.6 mg/l Daphnia magna (Static) |
| n-Hexane 110-54-3 | - | 96-hr LC50 = 2.5 mg/l Fathead minnow | - | - |
| Ethylbenzene 100-41-4 | 72-hr EC50 = 1.7-7.6 mg/l Algae | 96-hr LC50 = 4 mg/L Rainbow trout | - | 48-hr EC50 = 1-4 mg/L Daphnia magna |
| Naphthalene 91-20-3 | - | 96-hr LC50 = 0.91-2.82 mg/l Rainbow trout (static) 96-hr LC50 = 1.99 mg/l Fathead minnow (static) | - | 48-hr LC50 = 1.6 mg/l Daphnia magna |

**Persistence and degradability** Expected to be inherently biodegradable. The presence of ethanol in this product may impede the biodegradation of benzene, toluene, ethylbenzene and xylene in groundwater, resulting in elongated plumes of these constituents.

**Bioaccummulation** Has the potential to bioaccumulate.

**Mobility in soil** May partition into air, soil and water.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Description of Waste Residues**
This material may be a flammable liquid waste.

**Safe Handling of Wastes**
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required. Use appropriate grounding and bonding practices. Use only non-sparking tools. Do not expose to heat, open flames, strong oxidizers or other sources of ignition. No smoking.

**Disposal of Wastes / Methods of Disposal**
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

**Methods of Contaminated Packaging Disposal**
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT (49 CFR 172.101):**

| | |
|---|---|
| **UN Proper shipping name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Transport Hazard Class(es):** | 3 |
| **Packing group:** | II |

**TDG (Canada):**

| | |
|---|---|
| **UN Proper shipping name:** | Gasoline |
| **UN/Identification No:** | UN 1203 |
| **Transport Hazard Class(es):** | 3 |
| **Packing group:** | II |

## 15. REGULATORY INFORMATION

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product does not contain any component(s) included on EPA's Extremely Hazardous Substance (EHS) List.

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Gasoline | NA |
| Toluene | NA |
| Ethyl Alcohol | NA |
| Xylene (mixed isomers) | NA |
| 1,2,4 Trimethylbenzene | NA |
| Benzene | NA |
| n-Hexane | NA |
| Ethylbenzene | NA |
| Naphthalene | NA |

**SARA Section 304:** This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| Gasoline | NA |
| Toluene | 1000 lb final RQ<br>454 kg final RQ |
| Ethyl Alcohol | NA |
| Xylene (mixed isomers) | 100 lb final RQ<br>45.4 kg final RQ |
| 1,2,4 Trimethylbenzene | NA |
| Benzene | 10 lb final RQ<br>4.54 kg final RQ |
| n-Hexane | 5000 lb final RQ<br>2270 kg final RQ |
| Ethylbenzene | 1000 lb final RQ<br>454 kg final RQ |
| Naphthalene | 100 lb final RQ<br>45.4 kg final RQ |

**SARA:** The following EPA hazard categories apply to this product:

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

**SARA Section 313:** This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Gasoline | None |
| Toluene | 1.0 % de minimis concentration |
| Ethyl Alcohol | None |
| Xylene (mixed isomers) | 1.0 % de minimis concentration |
| 1,2,4 Trimethylbenzene | None |
| Benzene | 0.1 % de minimis concentration |
| n-Hexane | 1.0 % de minimis concentration |
| Ethylbenzene | 0.1 % de minimis concentration |
| Naphthalene | 0.1 % de minimis concentration |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Gasoline

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 0957 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed. |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree |

| | |
|---|---|
| New Jersey - Environmental Hazardous Substances List: | SN 0957 TPQ: 10000 lb (Under N.J.A.C. 7:1G, environmental hazardous substances in mixtures such as gasoline or new and used petroleum oil may be reported under these categories) |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Toluene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Developmental toxicity, initial date 1/1/91<br>Female reproductive toxicity, initial date 8/7/09 |
| New Jersey Right-To-Know: | SN 1866 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Flammable - third degree; Teratogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1866 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Ethyl Alcohol

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Carcinogen, initial date 4/29/11 (in alcoholic beverages)<br>Carcinogen, initial date 7/1/88 (when associated with alcohol abuse)<br>Developmental toxicity, initial date 10/1/87 (in alcoholic beverages) |
| New Jersey Right-To-Know: | SN 0844 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Teratogen |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree; Mutagen; Teratogen |
| New Jersey - Environmental Hazardous Substances List: | Not Listed. |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Xylene (mixed isomers)

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 2014 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold all isomers |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |

| | |
|---|---|
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 2014 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

1,2,4 Trimethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 1929 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Not Listed. |
| New Jersey - Environmental Hazardous Substances List: | Not Listed. |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed. |

Benzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Carcinogen, initial date 2/27/87<br>Developmental toxicity, initial date 12/26/97<br>Male reproductive toxicity, initial date 12/26/97 |
| New Jersey Right-To-Know: | SN 0197 |
| Pennsylvania Right-To-Know: | Environmental hazard; Special hazardous substance |
| Massachusetts Right-To Know: | Carcinogen; Extraordinarily hazardous |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic (skin); Flammable (skin); Carcinogen (skin) |
| Michigan Critical Materials Register List: | 100 lb Annual usage threshold |
| Massachusetts Extraordinarily Hazardous Substances: | Carcinogen; Extraordinarily hazardous |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Present |
| New Jersey - Special Hazardous Substances: | Carcinogen; Flammable - third degree; Mutagen |
| New Jersey - Environmental Hazardous Substances List: | SN 0197 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 10 lb RQ (air); 1 lb RQ (land/water) |

n-Hexane

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Not Listed. |
| New Jersey Right-To-Know: | SN 1340 |
| Pennsylvania Right-To-Know: | Present |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |

| | |
|---|---|
| New Jersey - Special Hazardous Substances: | Flammable - third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 1340 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1 lb RQ (air); 1 lb RQ (land/water) |

Ethylbenzene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Carcinogen, initial date 6/11/04 |
| New Jersey Right-To-Know: | SN 0851 |
| Pennsylvania Right-To-Know: | Environmental hazard |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Carcinogen; flammable - Third degree |
| New Jersey - Environmental Hazardous Substances List: | SN 0851 TPQ: 500 lb |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 1000 lb RQ (air); 1 lb RQ (land/water) |

Naphthalene

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed. |
| California Proposition 65: | Carcinogen, initial date 4/19/02 |
| New Jersey Right-To-Know: | SN 1322 SN 3758 |
| Pennsylvania Right-To-Know: | Environmental hazard Present (particulate) |
| Massachusetts Right-To Know: | Present |
| Florida Substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Toxic; Flammable |
| Michigan Critical Materials Register List: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed. |
| California - Regulated Carcinogens: | Not Listed. |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed. |
| New Jersey - Special Hazardous Substances: | Carcinogen |
| New Jersey - Environmental Hazardous Substances List: | SN 1322 TPQ: 500 lb (Reportable at the de minimis quantity of >0.1%) |
| Illinois - Toxic Air Contaminants | Present |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | 100 lb RQ (air); 1 lb RQ (land/water) |

**Canada DSL/NDSL Inventory:** This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

**Canadian Regulatory Information:** "This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations."

| Name | Canada - WHMIS: Classifications of Substances: | Canada - WHMIS: Ingredient Disclosure: |
|---|---|---|
| Gasoline | B2,D2A,D2B | 0.1% |
| Toluene | B2,D2A,D2B | 0.1% |
| Ethyl Alcohol | B2,D2B | 0.1% |
| Xylene (mixed isomers) | B2,D2A,D2B | m-, o-isomers 1.0%; p-isomer 0.1% |
| 1,2,4 Trimethylbenzene | B3 | 1 |
| Benzene | B2,D2A,D2B | 0.1% |

| | | |
|---|---|---|
| n-Hexane | B2,D2A,D2B | 1% |
| Ethylbenzene | B2,D2A,D2B | 0.1% |
| Naphthalene | B4,D2A | 0.1% |

**NOTE:** Not Applicable.

## 16. OTHER INFORMATION

**Prepared By** Toxicology and Product Safety
**Revision Date:** 05/18/2015

**Revision Note:**

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

# Material Safety Data Sheet

**MSDS ID NO.:** 0124SPE012
**Revision date:** 06/02/2006

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product code:** SW01

**Product name:** SSA Speedway Heavy Duty SAE 30 Motor Oil
**Synonym:** Speedway HD-30 Motor Oil; Speedway Heavy Duty SAE 30 Motor Oil; Speedway HD-SAE 30 Heavy Duty Motor Oil; Speedway Heavy Duty Motor Oil
**Chemical Family:** Motor/Lube Oil

**Formula:** Mixture

**Manufacturer:**
Speedway/Superamerica LLC
P O BOX 1500
ENON OH 45501

**Other information:** 419-421-3070
**Emergency telephone number:** 877-627-5463

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Motor oil is a complex mixture of highly refined lubricating oil base stocks and additives.

**Product information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Speedway Heavy Duty SAE 30 Motor Oil | Mixture | 100 | | | |

**Component Information:**

| Name | CAS Number | Weight % | ACGIH Exposure Limits: | OSHA - Vacated PELs - Time Weighted Ave | Other: |
|---|---|---|---|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | 64742-54-7 | 93-95 | | | |
| Additives | Not specified | 5-7 | | | |
| Zinc Alkyl Dithiophosphate | 68649-42-3 | 0.6-1.0 | | | |

**Notes:** The manufacturer has voluntarily elected to reflect exposure limits contained in OSHA's 1989 air contaminants standard in its MSDS's, even though certain of those exposure limits were vacated in 1992.

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

MOTOR OIL IS A NON-VOLATILE AND NON-COMBUSTIBLE, AMBER COLORED LIQUID, BUT WILL IGNITE AND BURN AT ELEVATED TEMPERATURES.

**OSHA WARNING LABEL:**

**THIS PRODUCT HAS BEEN EVALUATED AND DOES NOT REQUIRE ANY HAZARD WARNING LABEL UNDER THE OSHA HAZARD COMMUNICATION STANDARD.**

**CONSUMER WARNING LABEL:**

**A CONSUMER WARNING LABEL IS NOT APPLICABLE FOR THIS PRODUCT.**

**Inhalation:** No acute effects expected from routine operations. Overheating of product may produce vapors which can cause respiratory irritation, dizziness and nausea.

**Ingestion:** Product has a low order of acute toxicity. This is based on data from components or similar products.

**Skin contact:** Prolonged or repeated liquid contact can cause dermatitis, folliculitis or oil acne.

**Eye contact:** Liquid or vapor contact may result in slight eye irritation.

**Carcinogenic Evaluation:**

**Product information:**

| Name | IARC Carcinogens: | NTP Carcinogens: | ACGIH - Carcinogens: | OSHA - Select Carcinogens: |
|---|---|---|---|---|
| Speedway Heavy Duty SAE 30 Motor Oil Mixture | NE | | | |

**Notes:** The International Agency for Research on Cancer (IARC) has determined that there is no evidence that severely solvent-refined oils are carcinogenic to experimental animals.

**Component Information:**

## 4. FIRST AID MEASURES

**Inhalation:** If affected, move person to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician. If symptoms or irritation occur with any exposure, call a physician.

**Skin contact:** Wash with soap and large amounts of water. Remove contaminated clothing. If symptoms or irritation occur, call a physician.

If product is accidentally injected into or under the skin, regardless of wound size or initial absence of symptoms, the individual should be evaluated immediately by a physician as a surgical emergency.

**Ingestion:** Not expected to be acutely toxic. If large amounts are swallowed, immediately call a physician.

**Eye contact:** Flush eyes with large amounts of tepid water for at least 15 minutes. If symptoms or irritation occur, call a physician.

**Notes to physician:** High velocity injection under the skin may result in serious injury. If left untreated the affected area is subject to infection, disfigurement, lack of blood circulation and may require amputation. When dispensed by high pressure equipment this material can easily penetrate the skin and leave a bloodless puncture wound. Material injected into a finger can be deposited into the palm of the hand. Within 24-48 hours the patient may experience swelling, discoloration, and throbbing pain in the affected area. Immediate treatment by a surgical specialist is recommended.

**Medical conditions aggravated by exposure:** Skin contact could aggravate an existing skin disorder or dermatitis condition.

## 5. FIRE FIGHTING MEASURES

**Suitable extinguishing media:** For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFT/ATC) can be used. Fire fighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Specific hazards:** This material is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at elevated temperatures.

**Special protective equipment for firefighters:** Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.

**Flash point:** >430 F, >221.1 C (COC)
**Autoignition temperature:** No data available.
**Flammable limits in air - lower (%):** No data available.
**Flammable limits in air - upper (%):** No data available.

**NFPA rating:**
Health: 1
Flammability: 1
Reactivity: 0
Other: -

**HMIS classification:**
Health: 1
Flammability: 1
Reactivity: 0
Special: *See Section 8 for guidance in selection of personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so. Advise authorities and National Response Center (800-424-8802) if substance has entered a watercourse or sewer. Advise local and state emergency services agencies, if appropriate. Contain liquid with sand or soil. Recover and return free product to proper containers. Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

## 7. HANDLING AND STORAGE

**Handling:**

Comply with all applicable EPA, OSHA, NFPA and consistent state and local requirements. Use appropriate grounding and bonding practices. Store in properly closed containers that are appropriately labeled and in a cool well-ventilated area. Do not cut, drill, grind or weld on empty containers since they may contain explosive residues. Do not pressurize or expose to heat, open flames, strong oxidizers or other sources of ignition.

Avoid repeated and prolonged skin contact. Exercise good personal hygiene including removal of soiled clothing and prompt washing with soap and water.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**PERSONAL PROTECTIVE EQUIPMENT**

| | |
|---|---|
| **Engineering measures:** | Local or general exhaust required in an enclosed area or when there is inadequate ventilation. |
| **Respiratory protection:** | Not required under normal conditions and adequate ventilation. Approved organic vapor chemical cartridge or supplied air respirators should be worn for exposures to any components exceeding the TLV or STEL. Observe respirator protection factor criteria cited in ANSI Z88.2. Self-contained breathing apparatus should be used for fire fighting. |
| **Skin and body protection:** | Use chemical resistant gloves such as neoprene, nitrile, or PVA to prevent prolonged or repeated skin contact. |
| **Eye protection:** | No special eye protection is normally required. |

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

| | |
|---|---|
| **Appearance:** | Amber Liquid |
| **Physical state (Solid/Liquid/Gas):** | Liquid |
| **Substance type (Pure/Mixture):** | Mixture |
| **Color:** | Amber |
| **Odor:** | Hydrocarbon |
| **Molecular weight:** | Not determined. |
| **pH:** | Neutral |
| **Boiling point/range (5-95%):** | >425 F, 218.3 C |
| **Melting point/range:** | Not determined. |
| **Decomposition temperature:** | Not applicable. |
| **Specific gravity:** | Not determined |
| **Density:** | 7.34 lbs/gal @ 60 F |
| **Bulk density:** | No data available. |
| **Vapor density:** | No data available. |
| **Vapor pressure:** | Not determined. |
| **Evaporation rate:** | No data available. |
| **Solubility:** | Not determined |
| **Solubility in other solvents:** | No data available. |
| **Partition coefficient (n-octanol/water):** | >4.9 |
| **VOC content(%):** | No data available. |
| **Viscosity:** | 70.8 cSt @ 40 C<br>10.5 cSt @ 100 C |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Stability:** | The material is stable at 70 F, 760 mm pressure. |
| **Polymerization:** | Will not occur. |
| **Hazardous decomposition products:** | Carbon monoxide, carbon dioxide, hydrogen sulfide, oxides of sulfur, oxides of nitrogen, oxides of zinc, aldehydes and hydrocarbons., Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150 F. |
| **Materials to avoid:** | Strong oxidizers such as nitrates, chlorates, peroxides. |
| **Conditions to avoid:** | Heat and open flames. |

## 11. TOXICOLOGICAL INFORMATION

**Acute toxicity:**

**Product information:**

| Name | CAS Number | Inhalation: | Dermal: | Oral: |
|---|---|---|---|---|
| Speedway Heavy Duty SAE 30 Motor Oil | Mixture | LD50 = 2.18 to > 4 mg/l [Rat] | LD50 > 2 gm/kg [Rabbit] | LD50 > 5 ml/kg [Rat] |

Based on data from components this product is considered to have a low order of acute oral and dermal toxicity. Chronic skin painting studies with severely solvent refined neutral oils did not produce evidence of skin cancer in mice.

This product contains approximately 0-1.5% of a zinc alkyl dithiophosphate (ZDDP) additive. ZDDP has been found to have weak mutagenic activity in cultured cells. Repeated dermal exposures of ZDDP produced severe skin irritation, significant weight loss and testicular atrophy in male rabbits but not male rats at high concentrations. Subsequent research showed that the testicular effect was due to the severe stress and weight loss as seen with other caustic materials and not a direct effect of ZDDP. The concentration of ZDDP in this product is significantly lower than exposure levels that produced these effects in rabbits.

Used motor oil applied to the skin of rabbits at doses of 8 ml/kg/day, 5 days/wk, for two weeks, produced significant weight loss and skin irritation but no mortality. Used motor oil was found to produce skin tumors in mice in lifetime skin painting studies. Solvent extracts of used motor oils were found to be positive in the Ames mutagenicity test.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity effects:** Water accomated fractions (WAF) of highly refined base oils did not produce acute toxicity in fish (100-1000 mg/l), fresh water algae (500 mg/l) or daphnia (10,000 mg/l) in 48-96 hour LC50 studies.

Used motor and/or lube oils can be toxic to birds and fish.

## 13. DISPOSAL CONSIDERATIONS

**Cleanup Considerations:** This material as supplied and by itself, when discarded or disposed of, is not an EPA RCRA hazardous waste according to federal regulations. This material could become a hazardous waste if mixed or contaminated with a hazardous waste or other substance(s). It is the responsibility of the user to determine if disposal material is hazardous according to federal, state and local regulations.

Don't pollute. Conserve resources. Send used product to recycling center. Dispose of cleanup materials in accordance with applicable local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**49 CFR 172.101:**

**DOT:**

**Transport Information:** This material when transported via US commerce is NOT REGULATED by DOT regulations.

**Packing group:** Not applicable.
**DOT reportable quantity (lbs):** Not applicable.

**TDG (Canada):**

**Packing group:** Not applicable.

**Regulated substances:** Not applicable.

## 15. REGULATORY INFORMATION

**Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

OSHA Hazard Communication Standard: This product has been evaluated and determined not to be hazardous as defined in OSHA's Hazard Communication Standard.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product contains the following component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

| Name | CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Alkyl Dithiophosphate | NA |

**SARA Section 304:** This product contains the following component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

| Name | CERCLA/SARA - Hazardous Substances and their Reportable Quantities |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | NA |
| Additives | NA |
| Zinc Alkyl Dithiophosphate | NA |

**SARA Section 311/312:** The following EPA hazard categories apply to this product:

None

**SARA Section 313:** This product contains the following component(s) that may be subject to reporting on the Toxic Release Inventory (TRI) From R:

| Name | CERCLA/SARA 313 Emission reporting: |
|---|---|
| Distillates, Hydrotreated Heavy Paraffinic | None |
| Additives | None |
| Zinc Alkyl Dithiophosphate | None |

**State and Community Right-To-Know Regulations:**
The following component(s) of this material are identified on the regulatory lists below:

Distillates, Hydrotreated Heavy Paraffinic

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |

| | |
|---|---|
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Additives

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

Zinc Alkyl Dithiophosphate

| | |
|---|---|
| Louisiana Right-To-Know: | Not Listed |
| California Proposition 65: | Not Listed |
| New Jersey Right-To-Know: | Not Listed. |
| Pennsylvania Right-To-Know: | Not Listed. |
| Massachusetts Right-To Know: | Not Listed. |
| Florida substance List: | Not Listed. |
| Rhode Island Right-To-Know: | Not Listed |
| Michigan critical materials register list: | Not Listed. |
| Massachusetts Extraordinarily Hazardous Substances: | Not Listed |
| California - Regulated Carcinogens: | Not Listed |
| Pennsylvania RTK - Special Hazardous Substances: | Not Listed |
| New Jersey - Special Hazardous Substances: | Not Listed |
| New Jersey - Environmental Hazardous Substances List: | Not Listed |
| Illinois - Toxic Air Contaminants | Not Listed |
| New York - Reporting of Releases Part 597 - List of Hazardous Substances: | Not Listed |

**Canadian Regulatory Information:**

| | |
|---|---|
| Canada DSL/NDSL Inventory: | This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt. |

## 16. OTHER INFORMATION

**Additional Information:** No data available.

**Prepared by:** Craig M. Parker Manager, Toxicology and Product Safety

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**End of Safety Data Sheet**