



SAFETY DATA SHEET

1. INFORMATION

Product Name: MO2X WOA

Product Use:
Leaded racing gasoline.
California Air Resources Board (CARB):
This product cannot be sold, offered for sale,
supplied or offered for supply for motor
vehicles in California except in competition
racing vehicles. Not Legal For Use in Any
Other Motor Vehicle.

Synonyms: Leaded Racing Gasoline with Ethanol

Manufacturer:

| |
|---|
| Sunoco LP |
| 3801 West Chester Pike |
| Newtown Square, Pennsylvania, 19073 |
| performanceproducts@sunocoinc.com |
| http://www.racegas.com |
| 1-800-722-3427 |

Emergency Phone Numbers:

Chemtrec (800) 424-9300 (24 hours)
Sunoco LP (800) 964-8861 (24 hours)

SDS Information:

| | |
|----------------------------|--------------------------|
| Product Safety Information | (888) 567-3066 |
| Email | sunocomsds@sunocoinc.com |

2. HAZARDS IDENTIFICATION

2.1 Classification

CLP Classification

| Hazard Class/Category | Hazard Statement |
|-----------------------|--|
| Flammable Liquid 1 | Extremely flammable liquid and vapor H224 |

| | |
|---------------------------------|---|
| Aspiration Toxicity 1 | May be fatal if swallowed and enters airways H304 |
| STOT (Single exposure) 3 | May cause drowsiness or dizziness by inhalation H336 |
| STOT (Repeated exposure) 2 | May cause damage to central nervous system, liver, kidney, cardiovascular and respiratory system through prolonged and repeated exposure H373 |
| Skin Irritation 2 | Causes skin irritation H315 |
| Reproductive Toxicity 2 | Suspected of damaging fertility or the unborn child H361df |
| Aquatic Environment (Chronic) 2 | Toxic to aquatic life with long lasting effects H411 |

2.2 Label Elements

Hazard Pictograms:



DANGER

Hazard Statements

Extremely flammable liquid and vapor (H224). May be fatal if swallowed and enters airways (H304). May cause drowsiness or dizziness by inhalation (H336). May cause damage to central nervous system, liver, kidney, cardiovascular and respiratory system through prolonged and repeated exposure (H373). Causes skin irritation (H315). Suspected of damaging fertility or the unborn child (H361). Toxic to aquatic life with long lasting effects (H411).

Precautionary Statements

Obtain special instructions before use (P201). Do not handle until all safety precautions have been read and understood (P202). Keep away from heat/sparks/open flames/hot surfaces – No smoking (P210). Keep container tightly closed (P233). Ground/bond container and receiving equipment (P240). Use explosion-proof electrical/ventilating/light equipment (P241). Use only non-sparking tools (P242). Take precautionary measures against static discharge (P243). Avoid breathing mist, vapor, and spray (P261). Wash hands thoroughly after handling (P264). Do not eat, drink or smoke when using this product (P270). Use only outdoors or in a well-ventilated area (P271). Avoid release to the environment (P273). Wear protective gloves/protective clothing/eye protection/face protection (P280). Use personal protective equipment as required (P281).

IF SWALLOWED (P301): Immediately call a POISON CENTER or doctor/physician (P310). Do NOT induce vomiting (P331). IF ON SKIN (or hair) (P301): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower (P353). If skin irritation occurs (P332): Get medical attention (P313). Wash with plenty of soap and water (P352). IF INHALED (P304): Remove victim to fresh air and keep at rest in a position comfortable for breathing (P340). Call a POISON CENTER or doctor/physician if you feel unwell (P312). Take

off contaminated clothing and wash before reuse (P362). In case of fire (P370): Use foam or dry powder for extinction (P378). Collect spillage (P391). Store in well-ventilated place (P403). Keep container tightly closed (P233). Store locked up (P405). Dispose of contents/container to authorized hazardous waste facility (P501).

- **OTHER HAZARDS**

Vapors may cause flash fire or explosion. Static accumulator. May form an ignitable vapor/air mixture.

Hazards Ratings:

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

| | <u>Health</u> | <u>Fire</u> | <u>Reactivity</u> | <u>PPI</u> |
|------|---------------|-------------|-------------------|------------|
| NFPA | 1 | 3 | 0 | |
| HMIS | 2 | 3 | 0 | X |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| COMPONENT | CAS# | Amount Vol% |
|------------------|-------------|--------------------|
| Alkylate | 64741-66-8 | 60 - 85 |
| Toluene | 108-88-3 | 10 - 20 |
| Isopentane | 78-78-4 | 15 - 25 |
| Ethyl Alcohol | 64-17-5 | 5 - 10 |
| Tetraethyl Lead | 78-00-2 | 0.18 - 0.27 |
| Benzene | 71-43-2 | 0.001 - 0.01 |
| Ethyl Benzene | 100-41-4 | 0.001 - 0.01 |
| Hexane | 1330-20-7 | 0.001 - 0.01 |

NOTE P applies: The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1% w/w benzene. That is the case for this material.

NOTE H applies: The classification and labeling shown for this substance applies to the hazardous properties indicated by the hazard statements in combination with the hazard classes and categories shown.

4. FIRST AID MEASURES

- **INHALATION**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get immediate medical attention.

- **SKIN**

Immediately flush with large amounts of water for 20 minutes, use soap if available. Remove contaminated clothing, including shoes, after flushing has begun. Get prompt medical attention. Injection injuries may not appear serious at first but within a few hours, without proper treatment, the area will become swollen, discolored and extremely painful. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss.

Wash clothing before reuse.

- **EYES**

Flush eye with water for 20 minutes. Get medical attention.

- **INGESTION**

If swallowed, immediately contact a physician or Poison Control Center. Never give anything by mouth to an intoxicated, unconscious or convulsing person. Get immediate medical attention. Do not induce vomiting!

- **MOST IMPORTANT SYMPTOMS AND EFFECTS:**

ACUTE: Headache, drowsiness, dizziness, loss of coordination, disorientation and fatigue.

- **DELAYED:** See section 11

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- **INDICATION OF IMMEDIATE ATTENTION AND SPECIAL TREATMENT NEEDED:**

NOTE TO PHYSICIAN: Catecholamines and similar adrenergic drugs are generally contraindicated because of potential for increased sensitivity of the heart from hydrocarbon overexposure and subsequent ventricular fibrillation. EKG monitoring may be indicated and bronchodilators should be selected with care.

5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**

Dry chemical, carbon dioxide, or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Water may be ineffective for extinguishment.

- **FIRE FIGHTING INSTRUCTIONS**

Use water spray to cool fire exposed tanks and containers. Wear structural fire fighting gear. The use of fresh air equipment such as Self Contained Breathing Apparatus (SCBA) or Supplied Air Respirators should be worn for fire fighting if exposure or potential exposure to products of combustion is expected.

FLAMMABLE PROPERTIES

STATIC ACCUMULATOR. This liquid may form an ignitable vapor-air mixture in closed tanks or containers

6. ACCIDENTAL RELEASE MEASURES

Prevent ignition, stop leak and ventilate the area. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not use spark-generating metals for sweeping up spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Vapor can be controlled using a water fog. Water streams should not be directed to the liquid as this will cause the liquid to boil and generate more vapor. Keep personnel upwind from leak. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required.

7. HANDLING AND STORAGE

- **HANDLING**

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Use only in a well-ventilated area. **STATIC ACCUMULATOR.** This liquid may form an ignitable vapor-air mixture in closed tanks or containers. This liquid may accumulate static electricity even when transferred into properly grounded containers. Bonding and grounding may be insufficient to remove static electricity. Static electricity accumulation may be significantly increased by the presence of small quantities of water. Always bond receiving container to the fill pipe before and during loading, following NFPA-77 and/or API RP 2003 requirements. Automatic gauging devices and other floats in vessels or tanks which contain static accumulating liquids should be electrically bonded to the shell.

Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards associated with electrostatic charges. In addition to bonding and grounding, efforts to mitigate the hazards of an electrostatic discharge may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep the nozzle in contact with the container throughout the loading process. Do not fill any portable containers in or on a vehicle. Special precautions, such as reduced loading rates and increased monitoring, must be observed during "switch loading" operations (i.e. loading this material in tanks or shipping compartments that previously contained middle distillates or similar products). Non-equilibrium conditions may increase the risks associated with static electricity such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. Dissipation of electrostatic charges may be improved with the use of conductivity additives when used with other mitigating efforts, including bonding and grounding.

Avoid breathing (dust, vapor, mist, gas). Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Never siphon by mouth. "Empty" containers retain product residue (liquid and/or vapor) and can

be dangerous. DO NOT PRESSURIZE, 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. Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioned, or properly disposed of.

- **STORAGE**

Keep away from heat, sparks, and flame. Keep container closed when not in use. Store in a cool dry place. Consult NFPA and / or OSHA codes for additional information. NFPA class IB storage. Flash point is less than 73 degrees F and boiling point is greater than or equal to 100 degrees F. Outside or detached storage is preferred.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

| Substance | Guideline | Short Term Exposure Limit (STEL) | Time Weighted Average (TWA) |
|------------------|------------------|---|------------------------------------|
| Alkylate | Sunoco | | 100 PPM |
| Toluene | US OSHA | | 200 PPM |
| Ethyl Alcohol | ACGIH | | 1000 PPM |
| Ethyl Alcohol | US OSHA | | 1000 PPM |
| Isopentane | Sunoco | 750 | |
| Isopentane | ACGIH | | 600 PPM |
| Isopentane | US OSHA | | 600 PPM |
| Tetraethyl Lead | ACGIH | | 0.1 mg/m3 |
| Tetraethyl Lead | US OSHA | | 0.075 mg/m3 |

Consult With a Health and Safety Professional for Specific Selections

- **ENGINEERING CONTROLS**

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use with adequate ventilation. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

- **PERSONAL PROTECTION**

- **EYE PROTECTION**

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

- **GLOVES or HAND PROTECTION**

The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Protective gloves are recommended to protect against contact with product. Nitrile(>8 hrs); Viton(>8hrs); Teflon(>8hrs).

- **RESPIRATORY PROTECTION**

Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Half-mask air purifying respirator with organic vapor cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with organic vapor cartridges is acceptable for exposures to fifty (50) times the exposure limit. Exposure should not exceed the cartridge limit of 1000 ppm. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-

demand full-face supplied air respirator with escape bottle or SCBA. Wear a NIOSH/OSHA approved (or equivalent) full-face piece airline respirator in the positive pressure mode with emergency escape provisions.

▪ **OTHER**

Where splashing is possible, full chemically resistant protective clothing (e.g., acid suit) and boots are required. The following materials are acceptable for use as protective clothing: Nitrile; Viton; Teflon; Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Remove contaminated clothing and wash before reuse. For non-fire emergencies, positive pressure SCBA and structural firefighter's protective clothing will provide only limited protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical Property | Typical | Units | Method |
|-------------------------------------|----------------------|--------|-----------------|
| Appearance | Clear Liquid | N/A | Unknown |
| Boiling Point | <100 | F | ASTM D 86 |
| (Initial) | <38 | C | |
| Boiling Range | 100-260 est | F | ASTM D 86 |
| | 38-127 est | C | |
| Liquid Conductivity | <50 varies | pS/m | Reference Value |
| Flash Point | - 40 Est. -40 | F C | Reference Value |
| Melting Point | No Data | F | |
| pH | Not Applicable | | |
| Octanol/Water Partition Coefficient | 2-7 | N/A | Reference Value |
| Lower Explosion Limit | 1.5 | % | Reference Value |
| Upper Explosion Limit | 7.6 | % | Reference Value |
| Specific Gravity | 0.76 | N/A | ASTM D 287 |
| Solubility In Water | NIL TO 15% | wt % | Reference Value |
| Odor | Gasoline Odor. | | Reference Value |
| Evaporation Rate | No data | | |
| Decomposition temp | No data | | |
| Odor Threshold | <1 | ppm | Reference Value |
| Flammability | | | |
| Vapor Pressure | 5 - 16 | psia | Reference Value |
| Viscosity (F) | no data | SUS | ASTM D 5191 |
| Viscosity (C) | no data | CsT | |
| % Volatile | 100 | wt % | Reference Value |
| Auto Ignition | 536 Est. 280 Est. | F C | Reference Value |

10. STABILITY AND REACTIVITY

- **STABILITY**

Stable

- **CONDITIONS TO AVOID**

Avoid heat, sparks and open flame. Avoid static discharge.

- **INCOMPATIBILITY**

The following materials are incompatible with this product: Strong oxidizers Alkaline materials; Acids; Chlorine; Concentrated oxygen; Halogens and halogenated compounds; Hydrogen peroxide;

- **HAZARDOUS DECOMPOSITION PRODUCTS**

Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.

- **HAZARDOUS POLYMERIZATION**

Will not polymerize.

11. TOXICOLOGICAL INFORMATION

- **POTENTIAL HEALTH EFFECTS**

- **PRE-EXISTING MEDICAL CONDITIONS**

The following diseases or disorders may be aggravated by exposure to this product: skin, eye, blood forming organs, nervous system, respiratory system, lung (asthma-like conditions), cardiovascular system, liver, kidney,

- **Acute Toxicity:** Samples of gasoline and a number of low boiling point naphtha streams have been tested in acute oral, dermal and inhalation studies. Results indicate the following:

- **Oral:** Rat oral LD₅₀ > 5000 mg/kg bodyweight (ARCO, 1986b)
- **Inhalation:** Rat inhalation LC₅₀ > 5.2 mg/l (ARCO, 1992)
- **Dermal:** Rabbit dermal LD₅₀ > 2000 mg/kg bodyweight (ARCO, 1986a)

- **Skin Corrosion / Irritation:** Samples of gasoline and a number of low boiling point naphtha streams have been tested in rabbit skin irritation studies. The majority of the data were derived using a 24 hour occluded exposure protocol. The degree of dermal irritation observed was variable, ranging from slight to moderate/severe, normally persisting for up to 14 days. There was no evidence of skin corrosion. Heavier, aromatic materials caused more irritation than lighter, paraffinic streams (API, 1995).

- **Serious Eye Damage / Irritation:** The effects of gasoline and low boiling point naphtha streams on the eye have been investigated in rabbits using a number of samples. None of the samples tested showed more than minimal redness and swelling, which resolved quickly (ARCO, 1986d).

- **Respiratory or Skin Sensitization:** Tests in guinea pigs with gasoline and a number of low boiling point naphtha streams showed no evidence of skin sensitization (ARCO, 1986c). There are no reports available to indicate that gasoline or low boiling point naphthas have the potential to cause respiratory sensitization.

- **Germ Cell Mutagenicity:** The mutagenic potential of gasoline and low boiling point naphthas has been extensively studied in a range of *in vivo* and *in vitro* assays. The majority of the studies showed no evidence of mutagenic activity. Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a germ cell mutagen (API, 1977; API, 2005).

- **Carcinogenicity:** The carcinogenic potential of gasoline has been investigated in rats and mice following inhalation exposure for 2 years. In rats, there was an increased incidence of kidney tumours in males and in mice there was an increased incidence of liver tumours in females; further work has shown that these tumours are sex and species specific and are not considered relevant to humans (Short BG *et al.*, 1989). Results of 2 year skin painting studies with gasoline or low boiling point naphthas have shown either no, or weak potential (low incidence and long latent period) for the development of skin tumours. Additional work has shown that where tumours arise they are most likely a result of a non-genotoxic response due to dermal irritation (API, 1983). Gasoline and low boiling point naphthas can contain benzene, a constituent that is classified as a human carcinogen.

- **Reproductive Toxicity:** Results of guideline developmental toxicity studies on gasolines and OECD developmental toxicity screening studies with low boiling point naphtha streams showed no evidence of developmental toxicity in rats (Roberts L et al, 2001). Similarly, studies in rats with gasoline did not show any effect on reproductive performance (McKee RH et al, 2000). Gasoline and low boiling point naphthas can contain amounts of toluene and/or n-hexane, constituents that are classified as reprotoxicants.
- **Specific Target Organ Toxicity (STOT)**
 - **Single Exposure:** Acute exposure studies show no evidence of systemic toxicity, other than a potential to cause narcosis / CNS depression at higher exposure concentrations (Drinker P et al, 1943; Davis A et al 1960).
 - **Repeated Exposure:** The repeat dose toxicity of gasoline and low boiling point naphthas has been studied in rats following dermal and inhalation exposure for periods between 10 days and up to 2 years. The effects of repeated inhalation exposure of primates to gasoline have also been studied. In dermal studies, no systemic toxicity has been seen; the only effect observed was moderate to severe dermal irritation. Repeated inhalation exposure causes light hydrocarbon nephropathy in male rats, an effect which is considered to be both sex and species specific. (Halder CA et al, 1985; API, 2005; ARCO, 1986e)
- **Aspiration:** Gasoline and low boiling point naphthas are low viscosity, mobile hydrocarbon liquids with a viscosity at 40°C of < 7 mm²/s.
- **Component Toxicity Information**
Tetraethyl lead is toxic by ingestion, intraperitoneal, intravenous, subcutaneous and parenteral routes. It is moderately toxic by inhalation and skin contact. Teratogenic and reproductive effects have been associated with tetraethyl lead in experimental animals. Lead compounds such as tetraethyl lead, can affect the central nervous system. Initial health effects from overexposure to organic lead compounds could include subtle central nervous system effects such as insomnia or mood changes. These signs could progress to toxic psychosis with delirium, convulsions or coma if exposure is continued or increased. Higher exposure could also cause signs of nonspecific discomfort, such as nausea, headache or weakness. Abnormal liver function as indicated by laboratory test, and pulmonary edema could occur from gross overexposure. Death could result from pulmonary edema or neurological effects. Prolonged and repeated excessive exposures to benzene can result in blood disorders ranging from anemia to leukemia. Hours of exposure to high airborne concentrations of toluene, a component of this product, has caused a hearing loss in laboratory animals.

12. ECOLOGICAL INFORMATION

Gasoline spills are toxic to fish and aquatic flora.

- **Acute (short-term) Aquatic Hazard:** Acute aquatic toxicity studies with fish, invertebrates and algae on samples of gasoline and low boiling point naphtha streams show acute toxicity values in the range 1-10 mg/l. These tests were carried out on water accommodated fractions, and in closed systems to prevent evaporative loss. (EBSI 1995a,b,c, CONCAWE, 1996, Petroleum Product Steward Council, 1995)

Chronic (long-term) Aquatic Hazard:

- **Chronic aquatic toxicity:** A chronic toxicity study in daphnia with an alkylate naphtha stream gave a NOELR of 2.6 mg/l (Springborn Laboratories, 1999).

Environmental fate (biodegradation / bioaccumulation): Substance is a hydrocarbon UVCB. Standard tests for biodegradation / bioaccumulation are intended for single substances and are not appropriate for complex substances. Based on compositional information available and measured or predicted data on key constituents, gasoline and gasoline naphthas are not expected to meet the criteria for ready degradability but are inherently biodegradable. Constituents of gasoline naphthas show measured or predicted values for $\log K_{ow} \geq 3$ and are considered potentially bioaccumulative.

13. DISPOSAL INFORMATION

Follow federal, state and local regulations. This material is classified as hazardous waste. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

Nominally empty containers are also classified as hazardous waste and therefore need to be controlled under relevant legislation. Reuse or recycle, if necessary.

14. TRANSPORT INFORMATION

| | |
|-----------------------|--|
| Governing Body | DOT |
| Mode | Ground |
| Proper Shipping Name | Gasoline |
| Hazard Class | 3 (Flammable liquid) |
| Packing Group | II |
| UN/UN No. | UN 1203 |
| Label | Flammable |
| RQ (Tetraethyl Lead) | (only required if container is greater than 500 gallons) |
| Governing Body | ARD/RID |
| Mode | Ground |
| Proper Shipping Name | Gasoline |
| Hazard Class | 3 (Flammable liquid) |
| Packing Group | II |
| UN/UN No. | UN 1203 |
| Label | Flammable |
| Flashpoint | -40 F |
| Governing Body | IMDG |
| Mode | Vessel |
| Proper Shipping Name | Gasoline |
| Hazard Class | 3.1 (Flammable liquid) |
| Packing Group | II |
| UN/UN No. | UN 1203 |
| Label | Flammable |
| RQ (Tetraethyl Lead) | (only required if container is greater than 500 gallons) |
| Flash point | -40 F cc |

15. REGULATORY INFORMATION

This product contains the following EPCRA section 313 chemical subject to the reporting requirements of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372): Toulene- CAS Number 108-88-3, please check section 2 of the MSDS for the specific concentration. The remaining Sara 313 components listed in Section 14 of the MSDS are less than the reported de minimis levels. This information must be included in all MSDSs that are copied and distributed for this material.

| Regulatory List | Component | CAS No. |
|--|------------------|----------------|
| ACGIH - Occupational Exposure Limits - Carcinogens | BENZENE | 71-43-2 |
| ACGIH - Occupational Exposure Limits - Carcinogens | ETHYL ALCOHOL | 64-17-5 |
| ACGIH - Occupational Exposure Limits - Carcinogens | ETHYLBENZENE | 100-41-4 |
| ACGIH - Occupational Exposure Limits - Carcinogens | TETRAETHYL LEAD | 78-00-2 |

| | | |
|--|-----------------|----------|
| ACGIH - Occupational Exposure Limits - Carcinogens | TOLUENE | 108-88-3 |
| ACGIH - Occupational Exposure Limits - TWAs | BENZENE | 71-43-2 |
| ACGIH - Occupational Exposure Limits - TWAs | ETHYLBENZENE | 100-41-4 |
| ACGIH - Occupational Exposure Limits - TWAs | ISOPENTANE | 78-78-4 |
| ACGIH - Occupational Exposure Limits - TWAs | N-HEXANE | 110-54-3 |
| ACGIH - Occupational Exposure Limits - TWAs | TETRAETHYL LEAD | 78-00-2 |
| ACGIH - Occupational Exposure Limits - TWAs | TOLUENE | 108-88-3 |
| ACGIH - Short Term Exposure Limits | BENZENE | 71-43-2 |
| ACGIH - Short Term Exposure Limits | ETHYL ALCOHOL | 64-17-5 |
| ACGIH - Short Term Exposure Limits | ETHYLBENZENE | 100-41-4 |
| ACGIH - Skin Absorption Designation | BENZENE | 71-43-2 |
| ACGIH - Skin Absorption Designation | N-HEXANE | 110-54-3 |
| ACGIH - Skin Absorption Designation | TETRAETHYL LEAD | 78-00-2 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | ETHYLBENZENE | 100-41-4 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | N-HEXANE | 110-54-3 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | TOLUENE | 108-88-3 |
| CAA (Clean Air Act) - HON Rule - SOCOMI Chemicals | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - HON Rule - SOCOMI Chemicals | ETHYLBENZENE | 100-41-4 |
| CAA (Clean Air Act) - HON Rule - SOCOMI Chemicals | N-HEXANE | 110-54-3 |
| CAA (Clean Air Act) - HON Rule - SOCOMI Chemicals | TETRAETHYL LEAD | 78-00-2 |
| CAA (Clean Air Act) - HON Rule - SOCOMI Chemicals | TOLUENE | 108-88-3 |
| CAA - 1990 Hazardous Air Pollutants | BENZENE | 71-43-2 |
| CAA - 1990 Hazardous Air Pollutants | ETHYLBENZENE | 100-41-4 |
| CAA - 1990 Hazardous Air Pollutants | N-HEXANE | 110-54-3 |
| CAA - 1990 Hazardous Air Pollutants | TOLUENE | 108-88-3 |
| California - Prop. 65 - Developmental Toxicity | BENZENE | 71-43-2 |
| California - Prop. 65 - Developmental Toxicity | ETHYL ALCOHOL | 64-17-5 |
| California - Prop. 65 - Developmental Toxicity | TOLUENE | 108-88-3 |
| California - Prop. 65 - Reproductive - Female | TOLUENE | 108-88-3 |
| California - Prop. 65 - Reproductive - Male | BENZENE | 71-43-2 |
| California - Proposition 65 - Carcinogens List | BENZENE | 71-43-2 |
| California - Proposition 65 - Carcinogens List | ETHYLBENZENE | 100-41-4 |
| Canada - WHMIS - Ingredient Disclosure | ETHYL ALCOHOL | 64-17-5 |
| Canada - WHMIS - Ingredient Disclosure | ETHYLBENZENE | 100-41-4 |
| Canada - WHMIS - Ingredient Disclosure | N-HEXANE | 110-54-3 |
| Canada - WHMIS - Ingredient Disclosure | TOLUENE | 108-88-3 |
| CERCLA/SARA - Haz Substances and their RQs | BENZENE | 71-43-2 |
| CERCLA/SARA - Haz Substances and their RQs | ETHYLBENZENE | 100-41-4 |
| CERCLA/SARA - Haz Substances and their RQs | N-HEXANE | 110-54-3 |
| CERCLA/SARA - Haz Substances and their RQs | TETRAETHYL LEAD | 78-00-2 |
| CERCLA/SARA - Haz Substances and their RQs | TOLUENE | 108-88-3 |
| CERCLA/SARA - Section 302 EHS and TPQs | TETRAETHYL LEAD | 78-00-2 |
| CERCLA/SARA - Section 302 EHS and TPQs | TETRAETHYL LEAD | 78-00-2 |
| CERCLA/SARA - Section 302 EHS EPCRA RQs | TETRAETHYL LEAD | 78-00-2 |
| CERCLA/SARA - Section 313 - Emission Reporting | BENZENE | 71-43-2 |
| CERCLA/SARA - Section 313 - Emission Reporting | ETHYLBENZENE | 100-41-4 |
| CERCLA/SARA - Section 313 - Emission Reporting | N-HEXANE | 110-54-3 |
| CERCLA/SARA - Section 313 - Emission Reporting | TOLUENE | 108-88-3 |
| CWA (Clean Water Act) - Hazardous Substances | BENZENE | 71-43-2 |
| CWA (Clean Water Act) - Hazardous Substances | ETHYLBENZENE | 100-41-4 |
| CWA (Clean Water Act) - Hazardous Substances | TETRAETHYL LEAD | 78-00-2 |
| CWA (Clean Water Act) - Hazardous Substances | TOLUENE | 108-88-3 |
| CWA (Clean Water Act) - Priority Pollutants | BENZENE | 71-43-2 |
| CWA (Clean Water Act) - Priority Pollutants | ETHYLBENZENE | 100-41-4 |
| CWA (Clean Water Act) - Priority Pollutants | TOLUENE | 108-88-3 |
| CWA (Clean Water Act) - Toxic Pollutants | BENZENE | 71-43-2 |
| CWA (Clean Water Act) - Toxic Pollutants | ETHYLBENZENE | 100-41-4 |
| CWA (Clean Water Act) - Toxic Pollutants | TOLUENE | 108-88-3 |
| IARC - Group 1 (carcinogenic to humans) | BENZENE | 71-43-2 |

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|---|-----------------|------------|
| IARC - Group 1 (carcinogenic to humans) | ETHYL ALCOHOL | 64-17-5 |
| IARC - Group 2B (Possibly carcinogenic to humans) | ETHYLBENZENE | 100-41-4 |
| IARC - Group 3 (not classifiable) | TOLUENE | 108-88-3 |
| Inventory - Australia (AICS) | ALKYLATE | 64741-66-8 |
| Inventory - Australia (AICS) | BENZENE | 71-43-2 |
| Inventory - Australia (AICS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Australia (AICS) | ETHYLBENZENE | 100-41-4 |
| Inventory - Australia (AICS) | ISOPENTANE | 78-78-4 |
| Inventory - Australia (AICS) | N-HEXANE | 110-54-3 |
| Inventory - Australia (AICS) | TETRAETHYL LEAD | 78-00-2 |
| Inventory - Australia (AICS) | TOLUENE | 108-88-3 |
| Inventory - Canada - Domestic Substances List | ALKYLATE | 64741-66-8 |
| Inventory - Canada - Domestic Substances List | BENZENE | 71-43-2 |
| Inventory - Canada - Domestic Substances List | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Canada - Domestic Substances List | ETHYLBENZENE | 100-41-4 |
| Inventory - Canada - Domestic Substances List | ISOPENTANE | 78-78-4 |
| Inventory - Canada - Domestic Substances List | N-HEXANE | 110-54-3 |
| Inventory - Canada - Domestic Substances List | TETRAETHYL LEAD | 78-00-2 |
| Inventory - Canada - Domestic Substances List | TOLUENE | 108-88-3 |
| Inventory - China | ALKYLATE | 64741-66-8 |
| Inventory - China | BENZENE | 71-43-2 |
| Inventory - China | ETHYL ALCOHOL | 64-17-5 |
| Inventory - China | ETHYLBENZENE | 100-41-4 |
| Inventory - China | ISOPENTANE | 78-78-4 |
| Inventory - China | N-HEXANE | 110-54-3 |
| Inventory - China | TETRAETHYL LEAD | 78-00-2 |
| Inventory - China | TOLUENE | 108-88-3 |
| Inventory - European EINECS Inventory | ALKYLATE | 64741-66-8 |
| Inventory - European EINECS Inventory | BENZENE | 71-43-2 |
| Inventory - European EINECS Inventory | ETHYL ALCOHOL | 64-17-5 |
| Inventory - European EINECS Inventory | ETHYLBENZENE | 100-41-4 |
| Inventory - European EINECS Inventory | ISOPENTANE | 78-78-4 |
| Inventory - European EINECS Inventory | N-HEXANE | 110-54-3 |
| Inventory - European EINECS Inventory | TETRAETHYL LEAD | 78-00-2 |
| Inventory - European EINECS Inventory | TOLUENE | 108-88-3 |
| Inventory - Japan - (ENCS) | BENZENE | 71-43-2 |
| Inventory - Japan - (ENCS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Japan - (ENCS) | ETHYLBENZENE | 100-41-4 |
| Inventory - Japan - (ENCS) | ISOPENTANE | 78-78-4 |
| Inventory - Japan - (ENCS) | N-HEXANE | 110-54-3 |
| Inventory - Japan - (ENCS) | TOLUENE | 108-88-3 |
| Inventory - Korea - Existing and Evaluated | ALKYLATE | 64741-66-8 |
| Inventory - Korea - Existing and Evaluated | BENZENE | 71-43-2 |
| Inventory - Korea - Existing and Evaluated | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Korea - Existing and Evaluated | ETHYLBENZENE | 100-41-4 |
| Inventory - Korea - Existing and Evaluated | ISOPENTANE | 78-78-4 |
| Inventory - Korea - Existing and Evaluated | N-HEXANE | 110-54-3 |
| Inventory - Korea - Existing and Evaluated | TETRAETHYL LEAD | 78-00-2 |
| Inventory - Korea - Existing and Evaluated | TOLUENE | 108-88-3 |
| Inventory - Philippines Inventory (PICCS) | ALKYLATE | 64741-66-8 |
| Inventory - Philippines Inventory (PICCS) | BENZENE | 71-43-2 |
| Inventory - Philippines Inventory (PICCS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Philippines Inventory (PICCS) | ETHYLBENZENE | 100-41-4 |
| Inventory - Philippines Inventory (PICCS) | ISOPENTANE | 78-78-4 |
| Inventory - Philippines Inventory (PICCS) | N-HEXANE | 110-54-3 |
| Inventory - Philippines Inventory (PICCS) | TETRAETHYL LEAD | 78-00-2 |
| Inventory - Philippines Inventory (PICCS) | TOLUENE | 108-88-3 |
| Inventory - TSCA - Sect. 8(b) Inventory | ALKYLATE | 64741-66-8 |
| Inventory - TSCA - Sect. 8(b) Inventory | BENZENE | 71-43-2 |
| Inventory - TSCA - Sect. 8(b) Inventory | ETHYL ALCOHOL | 64-17-5 |

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| Inventory - TSCA - Sect. 8(b) Inventory | ETHYLBENZENE | 100-41-4 |
| Inventory - TSCA - Sect. 8(b) Inventory | ISOPENTANE | 78-78-4 |
| Inventory - TSCA - Sect. 8(b) Inventory | N-HEXANE | 110-54-3 |
| Inventory - TSCA - Sect. 8(b) Inventory | TETRAETHYL LEAD | 78-00-2 |
| Inventory - TSCA - Sect. 8(b) Inventory | TOLUENE | 108-88-3 |
| Massachusetts - Right To Know List | BENZENE | 71-43-2 |
| Massachusetts - Right To Know List | ETHYL ALCOHOL | 64-17-5 |
| Massachusetts - Right To Know List | ETHYLBENZENE | 100-41-4 |
| Massachusetts - Right To Know List | ISOPENTANE | 78-78-4 |
| Massachusetts - Right To Know List | N-HEXANE | 110-54-3 |
| Massachusetts - Right To Know List | TETRAETHYL LEAD | 78-00-2 |
| Massachusetts - Right To Know List | TOLUENE | 108-88-3 |
| New Jersey - Department of Health RTK List | BENZENE | 71-43-2 |
| New Jersey - Department of Health RTK List | ETHYL ALCOHOL | 64-17-5 |
| New Jersey - Department of Health RTK List | ETHYLBENZENE | 100-41-4 |
| New Jersey - Department of Health RTK List | ISOPENTANE | 78-78-4 |
| New Jersey - Department of Health RTK List | N-HEXANE | 110-54-3 |
| New Jersey - Department of Health RTK List | TETRAETHYL LEAD | 78-00-2 |
| New Jersey - Department of Health RTK List | TOLUENE | 108-88-3 |
| New Jersey - Env Hazardous Substances List | BENZENE | 71-43-2 |
| New Jersey - Env Hazardous Substances List | ETHYLBENZENE | 100-41-4 |
| New Jersey - Env Hazardous Substances List | ISOPENTANE | 78-78-4 |
| New Jersey - Env Hazardous Substances List | N-HEXANE | 110-54-3 |
| New Jersey - Env Hazardous Substances List | TETRAETHYL LEAD | 78-00-2 |
| New Jersey - Env Hazardous Substances List | TOLUENE | 108-88-3 |
| New Jersey - Env Hazardous Substances List | BENZENE | 71-43-2 |
| New Jersey - Special Hazardous Substances | ETHYL ALCOHOL | 64-17-5 |
| New Jersey - Special Hazardous Substances | ETHYLBENZENE | 100-41-4 |
| New Jersey - Special Hazardous Substances | ISOPENTANE | 78-78-4 |
| New Jersey - Special Hazardous Substances | N-HEXANE | 110-54-3 |
| New Jersey - Special Hazardous Substances | TETRAETHYL LEAD | 78-00-2 |
| New Jersey - Special Hazardous Substances | TOLUENE | 108-88-3 |
| NTP - Report on Carcinogens - Known Carcinogens | BENZENE | 71-43-2 |
| OSHA - Final PELs - Ceiling Limits | BENZENE | 71-43-2 |
| OSHA - Final PELs - Ceiling Limits | TOLUENE | 108-88-3 |
| OSHA - Final PELs - Short Term Exposure Limits | BENZENE | 71-43-2 |
| OSHA - Final PELs - Skin Notations | TETRAETHYL LEAD | 78-00-2 |
| OSHA - Final PELs - Time Weighted Averages | BENZENE | 71-43-2 |
| OSHA - Final PELs - Time Weighted Averages | ETHYL ALCOHOL | 64-17-5 |
| OSHA - Final PELs - Time Weighted Averages | ETHYLBENZENE | 100-41-4 |
| OSHA - Final PELs - Time Weighted Averages | N-HEXANE | 110-54-3 |
| OSHA - Final PELs - Time Weighted Averages | TETRAETHYL LEAD | 78-00-2 |
| OSHA - Final PELs - Time Weighted Averages | TOLUENE | 108-88-3 |
| Pennsylvania - RTK (Right to Know) List | BENZENE | 71-43-2 |
| Pennsylvania - RTK (Right to Know) List | ETHYL ALCOHOL | 64-17-5 |
| Pennsylvania - RTK (Right to Know) List | ETHYLBENZENE | 100-41-4 |
| Pennsylvania - RTK (Right to Know) List | ISOPENTANE | 78-78-4 |
| Pennsylvania - RTK (Right to Know) List | N-HEXANE | 110-54-3 |
| Pennsylvania - RTK (Right to Know) List | TETRAETHYL LEAD | 78-00-2 |
| Pennsylvania - RTK (Right to Know) List | TOLUENE | 108-88-3 |
| Pennsylvania - RTK - Special Hazardous Substances | BENZENE | 71-43-2 |

Title III Classifications Sections 311,312:

- Acute: **YES**
- Chronic: **YES**
- Fire: **YES**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

Canadian WHMIS Information



Class B-2, Class D-2A, Class D-2B

16. OTHER INFORMATION

Follow all MSDS/label precautions even after container is emptied because it may retain product residue. Keep out of reach of children. Precautionary labeling for pumps, portable containers, and drums is required. A "hazardous when empty" pictogram and D.O.T. flammable liquid label are also required for drums. Details available upon request. For use as motor fuel only. Do not use for any other purpose.

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