# *MATERIAL SAFETY DATA SHEET*

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** **SUNOCO PLUS-10% ETHANOL**

**Manufacturer Information:**

Sunoco, Inc. (R&M)
1735 Market Street LL

Philadelphia, Pennsylvania, 19103-7583

**Product Use:**

Motor Fuel

**Emergency Phone Numbers:**

| | |
|---|---|
| Chemtrec | (800) 424-9300 |
| Sunoco Inc. | (800) 964-8861 |

**Information:**

| | |
|---|---|
| Product Safety Information | (888) 567-3066 |

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No. | Amount (Vol%) |
|---|---|---|
| LIGHT PETROLEUM DISTILLATE | 8006-61-9 | 90 - 90 |
| TOLUENE | 108-88-3 | 0 - 30 |
| XYLENE | 1330-20-7 | 0 - 25 |
| ETHYL ALCOHOL | 64-17-5 | 10 - 10 |
| CYCLOHEXANE | 110-82-7 | 0 - 9 |
| ETHYL BENZENE | 100-41-4 | 0 - 5 |
| N-HEXANE | 110-54-3 | 0 - 5 |
| NAPHTHALENE | 91-20-3 | 0 - 5 |
| 1,2,4-TRIMETHYLBENZENE | 95-63-6 | 0 - 5 |
| BENZENE | 71-43-2 | 0.1 - 4.9 |
| CUMENE | 98-82-8 | 0 - 1 |

**EXPOSURE GUIDELINES (SEE SECTION 15 FOR ADDITIONAL EXPOSURE LIMITS)**

| | CAS No. | Governing Body | Exposure Limits | | |
|---|---|---|---|---|---|
| BENZENE | 71-43-2 | ACGIH | STEL | 2.5 | ppm |
| BENZENE | 71-43-2 | OSHA | STEL | 5 | ppm |
| BENZENE | 71-43-2 | ACGIH | TWA | 0.5 | ppm |
| BENZENE | 71-43-2 | OSHA | TWA | 1 | ppm |
| CUMENE | 98-82-8 | ACGIH | TWA | 50 | ppm |
| CUMENE | 98-82-8 | OSHA | TWA | 50 | ppm |
| CYCLOHEXANE | 110-82-7 | ACGIH | TWA | 100 | ppm |
| CYCLOHEXANE | 110-82-7 | OSHA | TWA | 300 | ppm |
| ETHYL ALCOHOL | 64-17-5 | ACGIH | TWA | 1000 | ppm |

| | | | | | |
|---|---|---|---|---|---|
| ETHYL ALCOHOL | 64-17-5 | OSHA | TWA | 1000 | ppm |
| ETHYL BENZENE | 100-41-4 | ACGIH | STEL | 125 | ppm |
| ETHYL BENZENE | 100-41-4 | ACGIH | TWA | 100 | ppm |
| ETHYL BENZENE | 100-41-4 | OSHA | TWA | 100 | ppm |
| N-HEXANE | 110-54-3 | ACGIH | TWA | 50 | ppm |
| N-HEXANE | 110-54-3 | OSHA | TWA | 500 | ppm |
| NAPHTHALENE | 91-20-3 | ACGIH | STEL | 15 | ppm |
| NAPHTHALENE | 91-20-3 | ACGIH | TWA | 10 | ppm |
| NAPHTHALENE | 91-20-3 | OSHA | TWA | 10 | ppm |
| TOLUENE | 108-88-3 | NIOSH | STEL | 150 | ppm |
| TOLUENE | 108-88-3 | ACGIH | TWA | 20 | ppm |
| TOLUENE | 108-88-3 | OSHA | TWA | 200 | ppm |
| XYLENE | 1330-20-7 | ACGIH | STEL | 150 | ppm |
| XYLENE | 1330-20-7 | ACGIH | TWA | 100 | ppm |
| XYLENE | 1330-20-7 | OSHA | TWA | 100 | ppm |
| LIGHT PETROLEUM DISTILLATE | 8006-61-9 | ACGIH | STEL | 500 | ppm |
| LIGHT PETROLEUM DISTILLATE | 8006-61-9 | ACGIH | TWA | 300 | ppm |

## 3. HAZARDS IDENTIFICATION

- **EMERGENCY OVERVIEW**
  Danger! Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage. Harmful if inhaled. High vapor concentrations may cause drowsiness. May cause skin irritation. May cause eye irritation. Contains material or materials that can cause birth defects. Contains material or materials that can cause cancer.

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

| | Health | Fire | Reactivity | PPI |
|---|---|---|---|---|
| NFPA | 1 | 3 | 0 | |
| HMIS | 2 | 3 | 0 | X |

- **POTENTIAL HEALTH EFFECTS**

  - **PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**
    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,
  - **INHALATION**
    Can cause severe central nervous system depression (including unconsciousness). May cause headaches and dizziness. Repeated excessive exposures may cause blood disorders such as anemia and leukemia. Contains a material that has been related to cancer in humans.

    **LC50 (mg/l):** no data
    **LC50 (mg/m3):** no data
    **LC50 (ppm):** no data

  - **SKIN**
    May be absorbed through the skin in harmful amounts. Moderately irritating to the skin. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

    **Draize Skin Score:** 4.8 Out of 8.0
    **LD50 (mg/kg):** no data

  - **EYES**
    Moderately irritating to the eyes.

- **INGESTION**
  Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage. Irritating to mouth, throat, and stomach. Contains material or materials that can cause birth defects.
  **LD50 (g/kg):** no data

## 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**
  Wash with soap and water for 20 minutes. Get medical attention if irritation develops or persists. Wash clothing before reuse.
- **EYES**
  Flush eye with water for 20 minutes. Get medical attention.
- **INGESTION**
  Do not induce vomiting! Do not give liquids! Get medical attention immediately.

## 5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA**
  Water spray; Regular foam; Dry chemical; Carbon dioxide;
- **FIRE FIGHTING INSTRUCTIONS**
  Use water spray to cool fire exposed tanks and containers. Wear structural fire fighting gear.
- **FLAMMABLE PROPERTIES**
  Extremely Flammable. Material will readily ignite at room temperatures.

| | Typical | Minimum | Maximum | Text Result | Units | Method |
|---|---|---|---|---|---|---|
| Flash Point | | | | MINUS 40 EST'D | F | N/A |
| Autoignition Temperature | | | | 536 EST. | F | N/A |
| Lower Explosion Limit | 1.5 | | | | % | N/A |
| Upper Explosion Limit | 7.6 | | | | % | N/A |

## 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. 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. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

## 7. HANDLING AND STORAGE

- **HANDLING**
  Use only in a well-ventilated area. Ground and bond containers when transferring material. NFPA class IA storage. Flash point is less than 73 degrees F and boiling point is less than 100 degrees F. Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Wash thoroughly after handling. Never siphon by mouth.
- **STORAGE**
  Keep away from heat, sparks, and flame. Keep container closed when not in use. Consult NFPA and / or OSHA codes for additional information.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

- **ENGINEERING CONTROLS**
  Use with adequate ventilation. Ventilation is normally required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Use explosion-proof ventilation equipment.
- **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. Polyethylene; Neoprene; Nitrile; Polyvinyl alcohol; Viton;
  - **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-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.
  - **OTHER**
    Where splashing is possible, full chemically resistant protective clothing and boots are required. The following materials are acceptable for use as protective clothing: Polyethylene; Polyvinyl alcohol (PVA); Neoprene; Nitrile; Viton; Polyurethane; 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 | Text Result | Reference |
|---|---|---|---|---|
| Appearance | | N/A | CLEAR LIQUID. | |
| Boiling Point | | F | 100 - 430 | |
| Bulk Density | | lb/gal | no data | |
| Liquid Conductivity | | pS/m | < 50 (varies) | |
| Melting Point | | F | no data | |
| Molecular Weight | | g/mole | no data | |
| Octanol/Water Coefficient | | N/A | no data | |
| pH | | N/A | no data | |
| Specific Gravity | 0.74 | N/A | | |
| Solubility In Water | | wt % | NIL TO 15% | |
| Odor | | N/A | GASOLINE ODOR. | |
| Odor Threshold | | ppm | < 1 | |
| Vapor Pressure | | mmHg | 325 - 525 | @ 20 C |
| Viscosity (F) | | SUS | no data | |
| Viscosity (C) | | CsT | no data | |

| | | | | |
|---|---|---|---|---|
| % Volatile | 100 | wt % | | |

## 10. STABILITY AND REACTIVITY

- **STABILITY**
  Stable
- **CONDITIONS TO AVOID**
  Avoid heat, sparks and open flame.
- **INCOMPATIBILITY**
  Strong oxidizers
- **HAZARDOUS DECOMPOSITION PRODUCTS**
  Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.
- **HAZARDOUS POLYMERIZATION**
  Will not polymerize.

## 11. ECOLOGICAL INFORMATION

No data available

## 12. DISPOSAL CONSIDERATIONS

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

## 13. TRANSPORT INFORMATION

| Governing Body | Mode | Proper Shipping Name |
|---|---|---|
| DOT | Ground | Ethanol and Gasoline Mixture |

| Governing Body | Mode | Hazard Class | UN/NA No. | Label |
|---|---|---|---|---|
| DOT | Ground | 3 (Flammable liquid) | UN 3475 | |

## 14. REGULATORY INFORMATION

| 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 | ETHYL BENZENE | 100-41-4 |
| ACGIH - Occupational Exposure Limits - Carcinogens | NAPHTHALENE | 91-20-3 |
| ACGIH - Occupational Exposure Limits - Carcinogens | TOLUENE | 108-88-3 |
| ACGIH - Occupational Exposure Limits - Carcinogens | XYLENE | 1330-20-7 |
| ACGIH - Occupational Exposure Limits - TWAs | BENZENE | 71-43-2 |
| ACGIH - Occupational Exposure Limits - TWAs | CUMENE | 98-82-8 |
| ACGIH - Occupational Exposure Limits - TWAs | CYCLOHEXANE | 110-82-7 |
| ACGIH - Occupational Exposure Limits - TWAs | ETHYL BENZENE | 100-41-4 |
| ACGIH - Occupational Exposure Limits - TWAs | N-HEXANE | 110-54-3 |
| ACGIH - Occupational Exposure Limits - TWAs | NAPHTHALENE | 91-20-3 |
| ACGIH - Occupational Exposure Limits - TWAs | TOLUENE | 108-88-3 |
| ACGIH - Occupational Exposure Limits - TWAs | XYLENE | 1330-20-7 |
| ACGIH - Short Term Exposure Limits | BENZENE | 71-43-2 |
| ACGIH - Short Term Exposure Limits | ETHYL ALCOHOL | 64-17-5 |
| ACGIH - Short Term Exposure Limits | ETHYL BENZENE | 100-41-4 |
| ACGIH - Short Term Exposure Limits | NAPHTHALENE | 91-20-3 |
| ACGIH - Short Term Exposure Limits | XYLENE | 1330-20-7 |
| ACGIH - Skin Absorption Designation | BENZENE | 71-43-2 |

| | | |
|---|---|---|
| ACGIH - Skin Absorption Designation | N-HEXANE | 110-54-3 |
| ACGIH - Skin Absorption Designation | NAPHTHALENE | 91-20-3 |
| CAA (Clean Air Act) - High Risk Haz Air Pollutants | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | CUMENE | 98-82-8 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | ETHYL BENZENE | 100-41-4 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | N-HEXANE | 110-54-3 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | NAPHTHALENE | 91-20-3 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | TOLUENE | 108-88-3 |
| CAA (Clean Air Act) - HON Rule - Organic HAPs | XYLENE | 1330-20-7 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | CUMENE | 98-82-8 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | CYCLOHEXANE | 110-82-7 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | ETHYL BENZENE | 100-41-4 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | N-HEXANE | 110-54-3 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | NAPHTHALENE | 91-20-3 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | TOLUENE | 108-88-3 |
| CAA (Clean Air Act) - HON Rule - SOCMI Chemicals | XYLENE | 1330-20-7 |
| CAA (Clean Air Act) - VOCs in SOCMI | BENZENE | 71-43-2 |
| CAA (Clean Air Act) - VOCs in SOCMI | CUMENE | 98-82-8 |
| CAA (Clean Air Act) - VOCs in SOCMI | CYCLOHEXANE | 110-82-7 |
| CAA (Clean Air Act) - VOCs in SOCMI | ETHYL ALCOHOL | 64-17-5 |
| CAA (Clean Air Act) - VOCs in SOCMI | ETHYL BENZENE | 100-41-4 |
| CAA (Clean Air Act) - VOCs in SOCMI | TOLUENE | 108-88-3 |
| CAA (Clean Air Act) - VOCs in SOCMI | XYLENE | 1330-20-7 |
| CAA - 1990 Hazardous Air Pollutants | BENZENE | 71-43-2 |
| CAA - 1990 Hazardous Air Pollutants | CUMENE | 98-82-8 |
| CAA - 1990 Hazardous Air Pollutants | ETHYL BENZENE | 100-41-4 |
| CAA - 1990 Hazardous Air Pollutants | N-HEXANE | 110-54-3 |
| CAA - 1990 Hazardous Air Pollutants | NAPHTHALENE | 91-20-3 |
| CAA - 1990 Hazardous Air Pollutants | TOLUENE | 108-88-3 |
| CAA - 1990 Hazardous Air Pollutants | XYLENE | 1330-20-7 |
| 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 | ETHYL BENZENE | 100-41-4 |
| California - Proposition 65 - Carcinogens List | NAPHTHALENE | 91-20-3 |
| Canada - CEPA - Sch. I - List of Toxic Substances | BENZENE | 71-43-2 |
| Canada - WHMIS - Ingredient Disclosure | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Canada - WHMIS - Ingredient Disclosure | CYCLOHEXANE | 110-82-7 |
| Canada - WHMIS - Ingredient Disclosure | ETHYL ALCOHOL | 64-17-5 |
| Canada - WHMIS - Ingredient Disclosure | ETHYL BENZENE | 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 | CUMENE | 98-82-8 |
| CERCLA/SARA - Haz Substances and their RQs | CYCLOHEXANE | 110-82-7 |
| CERCLA/SARA - Haz Substances and their RQs | ETHYL BENZENE | 100-41-4 |
| CERCLA/SARA - Haz Substances and their RQs | N-HEXANE | 110-54-3 |
| CERCLA/SARA - Haz Substances and their RQs | NAPHTHALENE | 91-20-3 |
| CERCLA/SARA - Haz Substances and their RQs | TOLUENE | 108-88-3 |
| CERCLA/SARA - Haz Substances and their RQs | XYLENE | 1330-20-7 |
| CERCLA/SARA - Section 313 - Emission Reporting | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| CERCLA/SARA - Section 313 - Emission Reporting | BENZENE | 71-43-2 |
| CERCLA/SARA - Section 313 - Emission Reporting | CUMENE | 98-82-8 |
| CERCLA/SARA - Section 313 - Emission Reporting | CYCLOHEXANE | 110-82-7 |
| CERCLA/SARA - Section 313 - Emission Reporting | ETHYL BENZENE | 100-41-4 |
| CERCLA/SARA - Section 313 - Emission Reporting | N-HEXANE | 110-54-3 |
| CERCLA/SARA - Section 313 - Emission Reporting | NAPHTHALENE | 91-20-3 |

| | | |
|---|---|---|
| CERCLA/SARA - Section 313 - Emission Reporting | TOLUENE | 108-88-3 |
| CERCLA/SARA - Section 313 - Emission Reporting | XYLENE | 1330-20-7 |
| CWA (Clean Water Act) - Hazardous Substances | BENZENE | 71-43-2 |
| CWA (Clean Water Act) - Hazardous Substances | CYCLOHEXANE | 110-82-7 |
| CWA (Clean Water Act) - Hazardous Substances | ETHYL BENZENE | 100-41-4 |
| CWA (Clean Water Act) - Hazardous Substances | NAPHTHALENE | 91-20-3 |
| CWA (Clean Water Act) - Hazardous Substances | TOLUENE | 108-88-3 |
| CWA (Clean Water Act) - Hazardous Substances | XYLENE | 1330-20-7 |
| CWA (Clean Water Act) - Priority Pollutants | BENZENE | 71-43-2 |
| CWA (Clean Water Act) - Priority Pollutants | ETHYL BENZENE | 100-41-4 |
| CWA (Clean Water Act) - Priority Pollutants | NAPHTHALENE | 91-20-3 |
| 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 | ETHYL BENZENE | 100-41-4 |
| CWA (Clean Water Act) - Toxic Pollutants | NAPHTHALENE | 91-20-3 |
| CWA (Clean Water Act) - Toxic Pollutants | TOLUENE | 108-88-3 |
| DEA - List II Essential Chemicals | TOLUENE | 108-88-3 |
| IARC - Group 1 (carcinogenic to humans) | BENZENE | 71-43-2 |
| IARC - Group 1 (carcinogenic to humans) | ETHYL ALCOHOL | 64-17-5 |
| IARC - Group 2B (Possibly carcinogenic to humans) | ETHYL BENZENE | 100-41-4 |
| IARC - Group 2B (Possibly carcinogenic to humans) | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| IARC - Group 2B (Possibly carcinogenic to humans) | NAPHTHALENE | 91-20-3 |
| IARC - Group 3 (not classifiable) | TOLUENE | 108-88-3 |
| IARC - Group 3 (not classifiable) | XYLENE | 1330-20-7 |
| Inventory - Australia (AICS) | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - Australia (AICS) | BENZENE | 71-43-2 |
| Inventory - Australia (AICS) | CUMENE | 98-82-8 |
| Inventory - Australia (AICS) | CYCLOHEXANE | 110-82-7 |
| Inventory - Australia (AICS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Australia (AICS) | ETHYL BENZENE | 100-41-4 |
| Inventory - Australia (AICS) | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - Australia (AICS) | N-HEXANE | 110-54-3 |
| Inventory - Australia (AICS) | NAPHTHALENE | 91-20-3 |
| Inventory - Australia (AICS) | TOLUENE | 108-88-3 |
| Inventory - Australia (AICS) | XYLENE | 1330-20-7 |
| Inventory - Canada - Domestic Substances List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - Canada - Domestic Substances List | BENZENE | 71-43-2 |
| Inventory - Canada - Domestic Substances List | CUMENE | 98-82-8 |
| Inventory - Canada - Domestic Substances List | CYCLOHEXANE | 110-82-7 |
| Inventory - Canada - Domestic Substances List | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Canada - Domestic Substances List | ETHYL BENZENE | 100-41-4 |
| Inventory - Canada - Domestic Substances List | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - Canada - Domestic Substances List | N-HEXANE | 110-54-3 |
| Inventory - Canada - Domestic Substances List | NAPHTHALENE | 91-20-3 |
| Inventory - Canada - Domestic Substances List | TOLUENE | 108-88-3 |
| Inventory - Canada - Domestic Substances List | XYLENE | 1330-20-7 |
| Inventory - China | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - China | BENZENE | 71-43-2 |
| Inventory - China | CUMENE | 98-82-8 |
| Inventory - China | CYCLOHEXANE | 110-82-7 |
| Inventory - China | ETHYL ALCOHOL | 64-17-5 |
| Inventory - China | ETHYL BENZENE | 100-41-4 |
| Inventory - China | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - China | N-HEXANE | 110-54-3 |
| Inventory - China | NAPHTHALENE | 91-20-3 |
| Inventory - China | TOLUENE | 108-88-3 |
| Inventory - China | XYLENE | 1330-20-7 |
| Inventory - European EINECS Inventory | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |

| | | |
|---|---|---|
| Inventory - European EINECS Inventory | BENZENE | 71-43-2 |
| Inventory - European EINECS Inventory | CUMENE | 98-82-8 |
| Inventory - European EINECS Inventory | CYCLOHEXANE | 110-82-7 |
| Inventory - European EINECS Inventory | ETHYL ALCOHOL | 64-17-5 |
| Inventory - European EINECS Inventory | ETHYL BENZENE | 100-41-4 |
| Inventory - European EINECS Inventory | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - European EINECS Inventory | N-HEXANE | 110-54-3 |
| Inventory - European EINECS Inventory | NAPHTHALENE | 91-20-3 |
| Inventory - European EINECS Inventory | TOLUENE | 108-88-3 |
| Inventory - European EINECS Inventory | XYLENE | 1330-20-7 |
| Inventory - Japan - (ENCS) | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - Japan - (ENCS) | BENZENE | 71-43-2 |
| Inventory - Japan - (ENCS) | CUMENE | 98-82-8 |
| Inventory - Japan - (ENCS) | CYCLOHEXANE | 110-82-7 |
| Inventory - Japan - (ENCS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Japan - (ENCS) | ETHYL BENZENE | 100-41-4 |
| Inventory - Japan - (ENCS) | N-HEXANE | 110-54-3 |
| Inventory - Japan - (ENCS) | NAPHTHALENE | 91-20-3 |
| Inventory - Japan - (ENCS) | TOLUENE | 108-88-3 |
| Inventory - Japan - (ENCS) | XYLENE | 1330-20-7 |
| Inventory - Korea - Existing and Evaluated | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - Korea - Existing and Evaluated | BENZENE | 71-43-2 |
| Inventory - Korea - Existing and Evaluated | CUMENE | 98-82-8 |
| Inventory - Korea - Existing and Evaluated | CYCLOHEXANE | 110-82-7 |
| Inventory - Korea - Existing and Evaluated | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Korea - Existing and Evaluated | ETHYL BENZENE | 100-41-4 |
| Inventory - Korea - Existing and Evaluated | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - Korea - Existing and Evaluated | N-HEXANE | 110-54-3 |
| Inventory - Korea - Existing and Evaluated | NAPHTHALENE | 91-20-3 |
| Inventory - Korea - Existing and Evaluated | TOLUENE | 108-88-3 |
| Inventory - Korea - Existing and Evaluated | XYLENE | 1330-20-7 |
| Inventory - New Zealand | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - New Zealand | BENZENE | 71-43-2 |
| Inventory - New Zealand | CUMENE | 98-82-8 |
| Inventory - New Zealand | CYCLOHEXANE | 110-82-7 |
| Inventory - New Zealand | ETHYL ALCOHOL | 64-17-5 |
| Inventory - New Zealand | ETHYL BENZENE | 100-41-4 |
| Inventory - New Zealand | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - New Zealand | N-HEXANE | 110-54-3 |
| Inventory - New Zealand | NAPHTHALENE | 91-20-3 |
| Inventory - New Zealand | TOLUENE | 108-88-3 |
| Inventory - New Zealand | XYLENE | 1330-20-7 |
| Inventory - Philippines Inventory (PICCS) | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - Philippines Inventory (PICCS) | BENZENE | 71-43-2 |
| Inventory - Philippines Inventory (PICCS) | CUMENE | 98-82-8 |
| Inventory - Philippines Inventory (PICCS) | CYCLOHEXANE | 110-82-7 |
| Inventory - Philippines Inventory (PICCS) | ETHYL ALCOHOL | 64-17-5 |
| Inventory - Philippines Inventory (PICCS) | ETHYL BENZENE | 100-41-4 |
| Inventory - Philippines Inventory (PICCS) | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - Philippines Inventory (PICCS) | N-HEXANE | 110-54-3 |
| Inventory - Philippines Inventory (PICCS) | NAPHTHALENE | 91-20-3 |
| Inventory - Philippines Inventory (PICCS) | TOLUENE | 108-88-3 |
| Inventory - Philippines Inventory (PICCS) | XYLENE | 1330-20-7 |
| Inventory - TSCA - Sect. 8(b) Inventory | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Inventory - TSCA - Sect. 8(b) Inventory | BENZENE | 71-43-2 |
| Inventory - TSCA - Sect. 8(b) Inventory | CUMENE | 98-82-8 |
| Inventory - TSCA - Sect. 8(b) Inventory | CYCLOHEXANE | 110-82-7 |
| Inventory - TSCA - Sect. 8(b) Inventory | ETHYL ALCOHOL | 64-17-5 |

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| Inventory - TSCA - Sect. 8(b) Inventory | ETHYL BENZENE | 100-41-4 |
| Inventory - TSCA - Sect. 8(b) Inventory | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Inventory - TSCA - Sect. 8(b) Inventory | N-HEXANE | 110-54-3 |
| Inventory - TSCA - Sect. 8(b) Inventory | NAPHTHALENE | 91-20-3 |
| Inventory - TSCA - Sect. 8(b) Inventory | TOLUENE | 108-88-3 |
| Inventory - TSCA - Sect. 8(b) Inventory | XYLENE | 1330-20-7 |
| Massachusetts - Right To Know List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Massachusetts - Right To Know List | BENZENE | 71-43-2 |
| Massachusetts - Right To Know List | CUMENE | 98-82-8 |
| Massachusetts - Right To Know List | CYCLOHEXANE | 110-82-7 |
| Massachusetts - Right To Know List | ETHYL ALCOHOL | 64-17-5 |
| Massachusetts - Right To Know List | ETHYL BENZENE | 100-41-4 |
| Massachusetts - Right To Know List | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| Massachusetts - Right To Know List | N-HEXANE | 110-54-3 |
| Massachusetts - Right To Know List | NAPHTHALENE | 91-20-3 |
| Massachusetts - Right To Know List | TOLUENE | 108-88-3 |
| Massachusetts - Right To Know List | XYLENE | 1330-20-7 |
| New Jersey - Department of Health RTK List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| New Jersey - Department of Health RTK List | BENZENE | 71-43-2 |
| New Jersey - Department of Health RTK List | CUMENE | 98-82-8 |
| New Jersey - Department of Health RTK List | CYCLOHEXANE | 110-82-7 |
| New Jersey - Department of Health RTK List | ETHYL ALCOHOL | 64-17-5 |
| New Jersey - Department of Health RTK List | ETHYL BENZENE | 100-41-4 |
| New Jersey - Department of Health RTK List | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| New Jersey - Department of Health RTK List | N-HEXANE | 110-54-3 |
| New Jersey - Department of Health RTK List | NAPHTHALENE | 91-20-3 |
| New Jersey - Department of Health RTK List | TOLUENE | 108-88-3 |
| New Jersey - Department of Health RTK List | XYLENE | 1330-20-7 |
| New Jersey - Env Hazardous Substances List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| New Jersey - Env Hazardous Substances List | BENZENE | 71-43-2 |
| New Jersey - Env Hazardous Substances List | CUMENE | 98-82-8 |
| New Jersey - Env Hazardous Substances List | CYCLOHEXANE | 110-82-7 |
| New Jersey - Env Hazardous Substances List | ETHYL BENZENE | 100-41-4 |
| New Jersey - Env Hazardous Substances List | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| New Jersey - Env Hazardous Substances List | N-HEXANE | 110-54-3 |
| New Jersey - Env Hazardous Substances List | NAPHTHALENE | 91-20-3 |
| New Jersey - Env Hazardous Substances List | TOLUENE | 108-88-3 |
| New Jersey - Env Hazardous Substances List | XYLENE | 1330-20-7 |
| New Jersey - Special Hazardous Substances | BENZENE | 71-43-2 |
| New Jersey - Special Hazardous Substances | CUMENE | 98-82-8 |
| New Jersey - Special Hazardous Substances | CYCLOHEXANE | 110-82-7 |
| New Jersey - Special Hazardous Substances | ETHYL ALCOHOL | 64-17-5 |
| New Jersey - Special Hazardous Substances | ETHYL BENZENE | 100-41-4 |
| New Jersey - Special Hazardous Substances | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| New Jersey - Special Hazardous Substances | N-HEXANE | 110-54-3 |
| New Jersey - Special Hazardous Substances | NAPHTHALENE | 91-20-3 |
| New Jersey - Special Hazardous Substances | TOLUENE | 108-88-3 |
| New Jersey - Special Hazardous Substances | XYLENE | 1330-20-7 |
| NTP - Report on Carcinogens - Known Carcinogens | BENZENE | 71-43-2 |
| NTP - Report on Carcinogens - Suspect Carcinogens | NAPHTHALENE | 91-20-3 |
| 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 | CUMENE | 98-82-8 |
| OSHA - Final PELs - Time Weighted Averages | BENZENE | 71-43-2 |
| OSHA - Final PELs - Time Weighted Averages | CUMENE | 98-82-8 |
| OSHA - Final PELs - Time Weighted Averages | CYCLOHEXANE | 110-82-7 |

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| OSHA - Final PELs - Time Weighted Averages | ETHYL ALCOHOL | 64-17-5 |
| OSHA - Final PELs - Time Weighted Averages | ETHYL BENZENE | 100-41-4 |
| OSHA - Final PELs - Time Weighted Averages | N-HEXANE | 110-54-3 |
| OSHA - Final PELs - Time Weighted Averages | NAPHTHALENE | 91-20-3 |
| OSHA - Final PELs - Time Weighted Averages | TOLUENE | 108-88-3 |
| OSHA - Final PELs - Time Weighted Averages | XYLENE | 1330-20-7 |
| OSHA - Hazard Communication Carcinogens | BENZENE | 71-43-2 |
| OSHA - Hazard Communication Carcinogens | ETHYL ALCOHOL | 64-17-5 |
| OSHA - Hazard Communication Carcinogens | ETHYL BENZENE | 100-41-4 |
| OSHA - Hazard Communication Carcinogens | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |
| OSHA - Hazard Communication Carcinogens | NAPHTHALENE | 91-20-3 |
| OSHA - Specifically Regulated Carcinogens | BENZENE | 71-43-2 |
| Pennsylvania - RTK (Right to Know) List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Pennsylvania - RTK (Right to Know) List | BENZENE | 71-43-2 |
| Pennsylvania - RTK (Right to Know) List | CUMENE | 98-82-8 |
| Pennsylvania - RTK (Right to Know) List | CYCLOHEXANE | 110-82-7 |
| Pennsylvania - RTK (Right to Know) List | ETHYL ALCOHOL | 64-17-5 |
| Pennsylvania - RTK (Right to Know) List | ETHYL BENZENE | 100-41-4 |
| Pennsylvania - RTK (Right to Know) List | N-HEXANE | 110-54-3 |
| Pennsylvania - RTK (Right to Know) List | NAPHTHALENE | 91-20-3 |
| Pennsylvania - RTK (Right to Know) List | TOLUENE | 108-88-3 |
| Pennsylvania - RTK (Right to Know) List | XYLENE | 1330-20-7 |
| Pennsylvania - RTK - Environmental Hazard List | 1,2,4-TRIMETHYLBENZENE | 95-63-6 |
| Pennsylvania - RTK - Environmental Hazard List | BENZENE | 71-43-2 |
| Pennsylvania - RTK - Environmental Hazard List | CUMENE | 98-82-8 |
| Pennsylvania - RTK - Environmental Hazard List | CYCLOHEXANE | 110-82-7 |
| Pennsylvania - RTK - Environmental Hazard List | ETHYL BENZENE | 100-41-4 |
| Pennsylvania - RTK - Environmental Hazard List | NAPHTHALENE | 91-20-3 |
| Pennsylvania - RTK - Environmental Hazard List | TOLUENE | 108-88-3 |
| Pennsylvania - RTK - Environmental Hazard List | XYLENE | 1330-20-7 |
| Pennsylvania - RTK - Special Hazardous Substances | BENZENE | 71-43-2 |
| TSCA - Sect. 12(b) - Export Notification | NAPHTHALENE | 91-20-3 |
| TSCA - Section 4 - Chemical Test Rules | CYCLOHEXANE | 110-82-7 |
| TSCA - Section 4 - Chemical Test Rules | NAPHTHALENE | 91-20-3 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | BENZENE | 71-43-2 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | CUMENE | 98-82-8 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | CYCLOHEXANE | 110-82-7 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | ETHYL BENZENE | 100-41-4 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | N-HEXANE | 110-54-3 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | NAPHTHALENE | 91-20-3 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | TOLUENE | 108-88-3 |
| U.S. - DOT - Hazardous Substances and RQs (App A) | XYLENE | 1330-20-7 |
| U.S. - DOT - Marine Pollutants - (App B) | LIGHT PETROLEUM DISTILLATE | 8006-61-9 |

**Title III Classifications Sections 311,312:**

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

## 15. OTHER INFORMATION

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. Because benzene is present in this product above 0.1%, the Osha Standard for benzene is applicable to work locations upstream of final discharge from terminals. Consult 29CFR1910.1028 for details. Prolonged and repeated excessive exposures to

benzene can result in blood disorders ranging from anemia to leukemia. Sun recommends that exposures to benzene be kept below 0.5 ppm for 8-hours; 2.5 ppm for 15-min. Normal service station operations are below these values. For use as motor fuel only. Do not use for any other purpose. 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. Following injection, prompt debridement of the wound is necessary to minimize necrosis and tissue loss. COMPONENT TOXICITY: Overexposure to naphthalene, a minor component of this product, may cause skin, eye and respiratory tract irritation, anemia, loss of vision, nervous system effects and kidney and thymus damage. Also, exposure to naphthalene has produced "respiratory tract" tumors in laboratory animals.