

Safety Data Sheet

Section 1: Identification

Product Identifier • **High Sulfur Diesel**

Synonyms • >500PPM Diesel; 500PPM Diesel; Heating Oil; LM500; No 2. Diesel

Relevant identified uses of the substance or mixture and uses advised against

Recommended use • Fuel

Restrictions on use • All others

Details of the supplier of the safety data sheet

Manufacturer • Guttman Energy, Inc.
200 Speers Street
Belle Vernon, PA 15012
United States
www.guttmanenergyfuels.com
safety@guttmanenergy.com

Emergency telephone number

Manufacturer • 1-800-535-5053 - INFOTRAC

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 3
Aspiration 1
Skin Irritation 2
Eye Irritation 2
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Carcinogenicity 2
Reproductive Toxicity 1B
Specific Target Organ Toxicity Repeated Exposure 1

Label elements

OSHA HCS 2012

DANGER



Hazard statements • Flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
Causes serious eye irritation
May cause drowsiness or dizziness

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Suspected of causing cancer.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.

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 and/or hot surfaces. - No smoking.
Keep container tightly closed.
Ground and/or bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mist, vapors and/or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.

Response

- In case of fire: Use appropriate media for extinction.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
If on skin: Wash with plenty of water.
Specific treatment, see supplemental first aid information.
Take off contaminated clothing and wash before reuse.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF exposed or concerned: Get medical advice/attention.
Get medical advice/attention if you feel unwell.

Storage/Disposal

- Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.
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Other information

NFPA

High Sulfur Diesel



Section 3 - Composition/Information on Ingredients

Substances

- Material does not meet the criteria of a substance.

Mixtures

| Composition | | | | | |
|------------------------|----------------|------------|---|--|----------|
| Chemical Name | Identifiers | % | LD50/LC50 | Classifications According to Regulation/Directive | Comments |
| Fuels, diesel, No. 2 | CAS:68476-34-6 | 100% | NDA | OSHA HCS 2012: Flam. Liq. 3; STOT SE 3: Narc.; Asp. Tox. 1; Skin Irrit. 2; Eye Irrit. 2; Repr. 1B; Carc. 2; STOT RE 1 (Blood, Eyes); | NDA |
| Kerosene | CAS:8008-20-6 | 0% TO 49% | Ingestion/Oral-Rat LD50 • 15 g/kg Inhalation-Rat LC50 • >5000 mg/m ³ 4 Hour(s) Skin-Rabbit LD50 • >2000 mg/kg | OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; Asp. Tox. 1; | NDA |
| 1,2,4-Trimethylbenzene | CAS:95-63-6 | 0% TO 1.8% | Ingestion/Oral-Rat LD50 • 5 g/kg Inhalation-Rat LC50 • 18000 mg/m ³ 4 Hour(s) | OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Resp. Irrit.; STOT SE 3: Narc. (CNS); Asp. Tox. 1; | NDA |
| Naphthalene | CAS:91-20-3 | 0% TO 1.6% | Skin-Rabbit LD50 • >20 g/kg Ingestion/Oral-Rat LD50 • 490 mg/kg | OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 4 (Orl); Skin Irrit. 2; Muta. 2; Carc. 2; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (Blood, Eyes - Orl, Inhl) | NDA |
| Xylene | CAS:1330-20-7 | 0% TO 0.9% | Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg | OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.; | NDA |
| Ethylbenzene | CAS:100-41-4 | 0% TO 0.9% | Ingestion/Oral-Rat LD50 • 3500 mg/kg Inhalation-Rat LC50 • 55000 mg/m ³ 2 Hour(s) Skin-Rabbit LD50 • >5000 mg/kg | OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (Inhl); Eye Irrit. 2; Carc. 2 (Inhl); Repr. 2 (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (Inhl); STOT RE 2 (Ear / Inhl); Asp. Tox. 1; | NDA |
| 1-Methylethylbenzene | CAS:98-82-8 | 0% TO 0.9% | Ingestion/Oral-Rat LD50 • 1400 mg/kg Skin-Rabbit LD50 • 12300 µL/kg Inhalation-Rat LC50 • 8000 ppm | OSHA HCS 2012: Flam. 3; Asp. Tox. 1; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Narc.; Carc. 2; Acute Tox. 4 (Orl); STOT SE 3: Resp. Irrit.; | NDA |
| Toluene | CAS:108-88-3 | < 0.09% | Ingestion/Oral-Rat LD50 • 636 mg/kg | OSHA HCS 2012: Exposure Limits | NDA |

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| | | | | | |
|--|--|--|---|--|--|
| | | | Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg | | |
|--|--|--|---|--|--|

Section 4: First-Aid Measures

Description of first aid measures

- Inhalation** • Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
- Skin** • In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing. Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.
- Eye** • In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If eye irritation persists: Get medical advice/attention.
- Ingestion** • Rinse mouth. Do NOT induce vomiting. Obtain medical attention immediately if ingested.

Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

- Notes to Physician** • All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

- Suitable Extinguishing Media** • CAUTION: For mixtures containing a high percentage of an alcohol or polar solvent, alcohol-resistant foam may be more effective.
SMALL FIRES: Dry chemical, CO₂, water spray or alcohol-resistant foam.
LARGE FIRES: Water spray, fog or alcohol-resistant foam.

- Unsuitable Extinguishing Media** • Avoid using direct water stream.

Special hazards arising from the substance or mixture

- Unusual Fire and Explosion Hazards** • HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Many liquids are lighter than water. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may travel to source of ignition and flash back. Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard.

- Hazardous Combustion Products** • No data available

Advice for firefighters

- Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.
Move containers from fire area if you can do it without risk.
LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions • CAUTION: Victim may be a source of contamination. Do not walk through spilled material. Use appropriate Personal Protective Equipment (PPE)

Emergency Procedures • As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures • Stop leak if you can do it without risk.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.
Use clean non-sparking tools to collect absorbed material.
A vapor suppressing foam may be used to reduce vapors.
All equipment used when handling the product must be grounded.
LARGE SPILLS: Dike far ahead of spill for later disposal.
LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Precautions for safe handling

Handling • Keep away from heat, sparks, and flame. Do not use sparking tools. Take precautionary measures against static charges. All equipment used when handling the product must be grounded. Do not breathe mist, vapors and/or spray. Avoid contact with skin, eyes or clothing. Wear appropriate personal protective equipment, avoid direct contact. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage • Store in a tightly closed container. Store in a cool/low-temperature, well-ventilated place.

Section 8 - Exposure Controls/Personal Protection

Control parameters

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| Exposure Limits/Guidelines | | | | |
|--------------------------------------|----------|---|--|--|
| | Result | ACGIH | NIOSH | OSHA |
| Naphthalene (91-20-3) | TWAs | 10 ppm TWA | 10 ppm TWA; 50 mg/m ³ TWA | 10 ppm TWA; 50 mg/m ³ TWA |
| | STELs | Not established | 15 ppm STEL; 75 mg/m ³ STEL | Not established |
| 1-Methylethylbenzene (98-82-8) | TWAs | 50 ppm TWA | 50 ppm TWA; 245 mg/m ³ TWA | 50 ppm TWA; 245 mg/m ³ TWA |
| Ethylbenzene (100-41-4) | TWAs | 20 ppm TWA | 100 ppm TWA; 435 mg/m ³ TWA | 100 ppm TWA; 435 mg/m ³ TWA |
| | STELs | Not established | 125 ppm STEL; 545 mg/m ³ STEL | Not established |
| Xylene (1330-20-7) | TWAs | 100 ppm TWA | Not established | 100 ppm TWA; 435 mg/m ³ TWA |
| | STELs | 150 ppm STEL | Not established | Not established |
| Kerosene (8008-20-6) | TWAs | 200 mg/m ³ TWA (application restricted to conditions in which there are negligible aerosol exposures, total hydrocarbon vapor) | 100 mg/m ³ TWA | Not established |
| 1,2,4-Trimethylbenzene (95-63-6) | TWAs | Not established | 25 ppm TWA; 125 mg/m ³ TWA | Not established |
| Toluene (108-88-3) | Ceilings | Not established | Not established | 300 ppm Ceiling |
| | TWAs | 20 ppm TWA | 100 ppm TWA; 375 mg/m ³ TWA | 200 ppm TWA |
| | STELs | Not established | 150 ppm STEL; 560 mg/m ³ STEL | Not established |
| Fuels, diesel, No. 2 (68476-34-6) | TWAs | 100 mg/m ³ TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel) | Not established | Not established |

Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Use explosion-proof electrical/ventilating/lighting/equipment.

Personal Protective Equipment

Respiratory

- Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. Organic vapor chemical cartridge or supplied air respirators should be worn for exposures to any components exceeding the established exposure limits.

Eye/Face

- Wear safety goggles.

Skin/Body

- Use nitrile rubber, viton or PVA gloves for repeated or prolonged skin exposure. Wear long sleeves and/or protective coveralls.

General Industrial Hygiene Considerations

- Always handle products in accordance with best industrial hygiene and safety practices in mind, specifically avoiding contact with skin, eyes and clothing.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties**Information on Physical and Chemical Properties****Material Description**

| | | | |
|----------------|---|------------------------|--|
| Physical Form | Liquid | Appearance/Description | Various colored liquid with red dye added to non-taxable fuel. |
| Color | Various colors, Note: red dye is added to non-taxable fuel. | Odor | No data available |
| Odor Threshold | No data available | | |

General Properties

| | | | |
|-----------------------------------|--------------------------------------|------------------------------|-------------------|
| Boiling Point | 335 to 840 F(168.3333 to 448.8889 C) | Melting Point/Freezing Point | No data available |
| Decomposition Temperature | No data available | pH | No data available |
| Specific Gravity/Relative Density | 0.8 to 0.88 Water=1 | Water Solubility | No data available |
| Viscosity | No data available | | |

Volatility

| | | | |
|------------------|-------------------|-----------------|-----------|
| Vapor Pressure | No data available | Vapor Density | > 1 Air=1 |
| Evaporation Rate | No data available | Volatiles (Wt.) | 100 % |
| Volatiles (Vol.) | 100 % | | |

Flammability

| | | | |
|---------------------------|------------------------------------|--------------|-------------------|
| Flash Point | 120 to 190 F(48.8889 to 87.7778 C) | UEL | 10 % |
| LEL | 0.3 % | Autoignition | No data available |
| Flammability (solid, gas) | No data available | | |

Environmental

| | | | |
|-------------------------------------|-------------------|--|--|
| Octanol/Water Partition coefficient | No data available | | |
|-------------------------------------|-------------------|--|--|

Section 10: Stability and Reactivity**Reactivity**

- No dangerous reaction known under conditions of normal use.

Chemical stability

- Stable under normal temperatures and pressures.

Possibility of hazardous reactions

- Hazardous polymerization not indicated.

Conditions to avoid

- Keep away from heat, sparks, and flame.

Incompatible materials

- No data available

Hazardous decomposition products

- No data available

Section 11 - Toxicological Information**Information on toxicological effects**

| Components | | |
|-----------------------------|------------|--|
| Fuels, diesel, No. 2 (100%) | 68476-34-6 | Tumorigen / Carcinogen: Skin-Mouse TDLo • 312 mL/kg 78 Week(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Skin and Appendages:Other:Tumors</i> |

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| Kerosene (0% TO 49%) | 8008-20-6 | <p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 15 g/kg; <i>Skin and Appendages:After topical exposure:Corrosive</i>; Inhalation-Rat LC50 • >5000 mg/m³ 4 Hour(s); <i>Behavioral:Somnolence (general depressed activity)</i>; Skin-Rabbit LD50 • >2000 mg/kg;</p> <p>Irritation: Eye-Rabbit • 0.1 mL; Skin-Rabbit • 500 mg • Severe irritation;</p> <p>Multi-dose Toxicity: Inhalation-Rat TClO • 300 mg/m³ 12 Week(s)-Intermittent; <i>Blood:Normocytic anemia; Blood:Leukopenia</i></p> |
| Xylene (0% TO 0.9%) | 1330-20-7 | <p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; <i>Liver:Other changes; Kidney, Ureter, and Bladder:Other changes</i>; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Man LCLo • 10000 ppm 6 Hour(s); <i>Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Cyanosis; Blood:Other changes</i>; Inhalation-Human TClO • 200 ppm; <i>Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes</i>; Skin-Rabbit LD50 • >1700 mg/kg;</p> <p>Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation;</p> <p>Reproductive: Inhalation-Mouse TClO • 2000 ppm 6 Hour(s)(6-12D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>; Inhalation-Rabbit TClO • 1 g/m³ 24 Hour(s)(7-20D preg); <i>Reproductive Effects:Effects on Fertility:Abortion</i>; Inhalation-Rat TClO • 50 mg/m³ 6 Hour(s)(1-21D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Craniofacial (including nose and tongue)</i></p> |
| 1,2,4-Trimethylbenzene (0% TO 1.8%) | 95-63-6 | <p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 5 g/kg; Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour(s);</p> <p>Mutagen: Sister chromatid exchange • Intraperitoneal-Mouse • 900 mg/kg</p> |
| Ethylbenzene (0% TO 0.9%) | 100-41-4 | <p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 3500 mg/kg; Inhalation-Guinea Pig LCLo • 2500 ppm 8 Hour(s); <i>Behavioral:Coma</i>; Inhalation-Human TClO • 21700 mg/m³; <i>Behavioral:Antipsychotic</i>; Inhalation-Mouse TClO • 600 ppm 6 Minute(s); <i>Lungs, Thorax, or Respiration:Respiratory depression</i>; Skin-Rabbit LD50 • 17800 µL/kg;</p> <p>Irritation: Eye-Rabbit • 500 mg • Severe irritation; Skin-Rabbit • 15 mg 24 Hour(s)-Open • Mild irritation;</p> <p>Multi-dose Toxicity: Inhalation-Rat TClO • 550 ppm 8 Hour(s) 5 Day(s)-Intermittent; <i>Sense Organs and Special Senses:Ear:Change in acuity; Sense Organs and Special Senses:Ear:Changes in cochlear structure or function</i>; Inhalation-Rat TDLo • 200 ppm 13 Week(s)-Intermittent; <i>Sense Organs and Special Senses:Ear:Changes in cochlear structure or function</i>;</p> <p>Mutagen: Specific locus test • Intraperitoneal-Mouse • 754 µmol/L; Micronucleus test • Unreported Route-Hamster • Embryo (Somatic cell) • 25 mg/L; Sister chromatid exchange • Unreported Route-Human • Lymphocyte (Somatic cell) • 10 mmol/L; Mutation in Mammalian Somatic Cells • Unreported Route-Mouse • Lymphocyte (Somatic cell) • 80 mg/L;</p> <p>Reproductive: Inhalation-Rabbit TClO • 1 g/m³ 24 Hour(s)(7-20D preg); <i>Reproductive Effects:Effects on Fertility:Abortion</i>; Inhalation-Rat TClO • 96 ppm 7 Hour(s)(1-19D preg); <i>Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>; Inhalation-Rat TClO • 1000 ppm (6-20D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus)</i>; Inhalation-Rat TClO • 600 mg/m³ 24 Hour(s)(7-15D preg); <i>Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetal death; Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system</i>;</p> <p>Tumorigen / Carcinogen: Inhalation-Mouse TClO • 750 ppm 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Bronchiogenic carcinoma; Liver:Tumors</i>; Inhalation-Rat TClO • 750 ppm 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Kidney, Ureter, and Bladder:Tumors</i>; Inhalation-Rat TClO • 23400 mg/kg 104 Week(s)-Intermittent; <i>Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Kidney, Ureter, and Bladder:Kidney tumors; Reproductive Effects:Tumorigenic Effects:Testicular tumors</i></p> |
| Naphthalene (0% TO 1.6%) | 91-20-3 | <p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 490 mg/kg; Ingestion/Oral-Mouse TDLo • 158 mg/kg; <i>Brain and Coverings:Other degenerative changes; Liver:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport</i>; Inhalation-Human TClO • 250 mg/m³; <i>Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Headache</i>; Skin-Rabbit LD50 • >20 g/kg; Unreported-Guinea Pig LD50 • 1200 mg/kg; <i>Behavioral:Somnolence (general depressed activity)</i>;</p> <p>Irritation: Skin-Rabbit • 0.05 mL 24 Hour(s) • Severe irritation;</p> <p>Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 4500 mg/kg 10 Day(s)-Intermittent; <i>Brain and Coverings:Other degenerative changes</i>; Ingestion/Oral-Rat TDLo • 500 mg/kg 10 Day(s)-Intermittent; <i>Behavioral:Sleep; Lungs, Thorax, or Respiration:Dyspnea</i>;</p> <p>Mutagen: Specific locus test • Inhalation-Rat • 30 ppm 13 Week(s)-Intermittent; Micronucleus test • Unreported Route-Human • Lymphocyte (Somatic cell) • 30 mg/L;</p> <p>Reproductive: Ingestion/Oral-Mouse TDLo • 2400 mg/kg (7-14D preg); <i>Reproductive Effects:Effects on Newborn:Live birth index; Reproductive Effects:Effects on Newborn:Viability index (e.g., # alive at day 4 per # born alive)</i>; Ingestion/Oral-Rat TDLo • 4500 mg/kg (6-15D preg); <i>Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities</i>;</p> <p>Tumorigen / Carcinogen: Inhalation-Mouse TClO • 30 ppm 6 Hour(s) 2 Year(s)-Intermittent;</p> |

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| | | <i>Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors</i> ; Inhalation-Rat TClO • 1575 mg/kg 105 Week(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</i> ; Inhalation-Rat TClO • 60 ppm 6 Hour(s) 105 Week(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</i> |
| 1-Methylethylbenzene (0% TO 0.9%) | 98-82-8 | Acute Toxicity: Ingestion/Oral-Rat LD50 • 1400 mg/kg; <i>Gastrointestinal:Gastritis</i> ; Inhalation-Rat LC50 • 39000 mg/m ³ 4 Hour(s); Inhalation-Human TClO • 200 ppm; <i>Behavioral:Somnolence (general depressed activity); Behavioral:Antipsychotic; Behavioral:Irritability</i> ; Skin-Rabbit LD50 • 12300 µL/kg; Irritation: Eye-Rabbit • 86 mg • Mild irritation; Skin-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rabbit TClO • 10000 mg/m ³ 2 Hour(s) 24 Week(s)-Intermittent; <i>Lungs, Thorax, or Respiration:Acute pulmonary edema; Blood:Hemorrhage; Blood:Changes in leucocyte (WBC) count</i> |

| GHS Properties | Classification |
|-------------------------------|--|
| Respiratory sensitization | OSHA HCS 2012•No data available |
| Serious eye damage/Irritation | OSHA HCS 2012•Eye Irritation 2 |
| Acute toxicity | OSHA HCS 2012•No data available |
| Aspiration Hazard | OSHA HCS 2012•Aspiration 1 |
| Carcinogenicity | OSHA HCS 2012•Carcinogenicity 2 |
| Germ Cell Mutagenicity | OSHA HCS 2012•No data available |
| Skin corrosion/Irritation | OSHA HCS 2012•Skin Irritation 2 |
| Skin sensitization | OSHA HCS 2012•No data available |
| STOT-RE | OSHA HCS 2012•Specific Target Organ Toxicity Repeated Exposure 1 |
| STOT-SE | OSHA HCS 2012•Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects |
| Toxicity for Reproduction | OSHA HCS 2012•Toxic to Reproduction 1B |

Potential Health Effects

Inhalation

Acute (Immediate)

- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

- No data available

Skin

Acute (Immediate)

- Causes skin irritation.

Chronic (Delayed)

- No data available

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available

Ingestion

Acute (Immediate)

- Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

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Chronic (Delayed) • No data available

Other

Chronic (Delayed) • Chronic exposure of workers to naphthalene has been reported to cause cataracts and retinal hemorrhage. Repeated and prolonged exposure may affect the blood and/or immune system.

Carcinogenic Effects • Repeated and prolonged exposure may cause cancer.

| Carcinogenic Effects | | | |
|-----------------------------|------------|------------------------------|---|
| | CAS | IARC | NTP |
| 1-Methylethylbenzene | 98-82-8 | Group 2B-Possible Carcinogen | Reasonably Anticipated to be Human Carcinogen |
| Ethylbenzene | 100-41-4 | Group 2B-Possible Carcinogen | Not Listed |
| Naphthalene | 91-20-3 | Group 2B-Possible Carcinogen | Reasonably Anticipated to be Human Carcinogen |

Reproductive Effects • Repeated and prolonged exposure may cause reproductive effects.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

- Non-mandatory section information about this substance not compiled for this reason.

Persistence and degradability

- Non-mandatory section information about this substance not compiled for this reason.

Bioaccumulative potential

- Non-mandatory section information about this substance not compiled for this reason.

Mobility in Soil

- Non-mandatory section information about this substance not compiled for this reason.

Other adverse effects

- Non-mandatory section information about this substance not compiled for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

High Sulfur Diesel

| | UN number | UN proper shipping name | Transport hazard class(es) | Packing group | Environmental hazards |
|-----|-----------|---------------------------------|----------------------------|---------------|-----------------------|
| DOT | UN1993 | Diesel Fuel, Combustible liquid | 3 | III | NDA |

Special precautions for user

• None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications

• Acute, Chronic, Fire

| Inventory | | |
|------------------------|------------|------|
| Component | CAS | TSCA |
| 1,2,4-Trimethylbenzene | 95-63-6 | Yes |
| 1-Methylethylbenzene | 98-82-8 | Yes |
| Ethylbenzene | 100-41-4 | Yes |
| Fuels, diesel, No. 2 | 68476-34-6 | Yes |
| Kerosene | 8008-20-6 | Yes |
| Naphthalene | 91-20-3 | Yes |
| Toluene | 108-88-3 | Yes |
| Xylene | 1330-20-7 | Yes |

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

| | | |
|-------------------------|------------|------------|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

U.S. - OSHA - Specifically Regulated Chemicals

| | | |
|-------------------------|------------|------------|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

| | | |
|-----------------------|------------|------------------------------|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | |
| •1-Methylethylbenzene | 98-82-8 | |
| •Ethylbenzene | 100-41-4 | (listed under Ethyl benzene) |
| •Toluene | 108-88-3 | |

High Sulfur Diesel

| | | |
|--|------------|------------------------------------|
| •Xylene | 1330-20-7 | (isomers and mixtures) |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | 100 lb final RQ; 45.4 kg final RQ |
| •1-Methylethylbenzene | 98-82-8 | 5000 lb final RQ; 2270 kg final RQ |
| •Ethylbenzene | 100-41-4 | 1000 lb final RQ; 454 kg final RQ |
| •Toluene | 108-88-3 | 1000 lb final RQ; 454 kg final RQ |
| •Xylene | 1330-20-7 | 100 lb final RQ; 45.4 kg final RQ |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Section 313 - Emission Reporting | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | 0.1 % de minimis concentration |
| •1-Methylethylbenzene | 98-82-8 | 1.0 % de minimis concentration |
| •Ethylbenzene | 100-41-4 | 0.1 % de minimis concentration |
| •Toluene | 108-88-3 | 1.0 % de minimis concentration |
| •Xylene | 1330-20-7 | 1.0 % de minimis concentration |
| •1,2,4-Trimethylbenzene | 95-63-6 | 1.0 % de minimis concentration |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |

High Sulfur Diesel

| | | |
|-------------------------|-----------|------------|
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

United States - California

Environment

U.S. - California - Proposition 65 - Carcinogens List

| | | |
|-------------------------|------------|----------------------------------|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | carcinogen, initial date 4/19/02 |
| •1-Methylethylbenzene | 98-82-8 | carcinogen, initial date 4/6/10 |
| •Ethylbenzene | 100-41-4 | carcinogen, initial date 6/11/04 |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

U.S. - California - Proposition 65 - Developmental Toxicity

| | | |
|-------------------------|------------|---|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | developmental toxicity, initial date 1/1/91 |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

| | | |
|-------------------------|------------|---|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | 7000 µg/day MADL (level represents absorbed dose) |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

| | | |
|-------------------------|------------|--|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | 5.8 µg/day NSRL |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | 54 µg/day NSRL (inhalation); 41 µg/day NSRL (oral) |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

| | | |
|-----------------------|------------|---|
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | female reproductive toxicity, initial date 8/7/09 |
| •Xylene | 1330-20-7 | Not Listed |

High Sulfur Diesel

| | | |
|--|------------|------------|
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |
| U.S. - California - Proposition 65 - Reproductive Toxicity - Male | | |
| •Fuels, diesel, No. 2 | 68476-34-6 | Not Listed |
| •Naphthalene | 91-20-3 | Not Listed |
| •1-Methylethylbenzene | 98-82-8 | Not Listed |
| •Ethylbenzene | 100-41-4 | Not Listed |
| •Toluene | 108-88-3 | Not Listed |
| •Xylene | 1330-20-7 | Not Listed |
| •1,2,4-Trimethylbenzene | 95-63-6 | Not Listed |
| •Kerosene | 8008-20-6 | Not Listed |

Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

| | |
|--|---|
| Revision Date | • 04/December/2015 |
| Preparation Date | • 04/December/2015 |
| Disclaimer/Statement of Liability | • The information herein is given in good faith but no warranty, expressed or implied, is made. |
| Key to abbreviations | |
| NDA = No Data Available | |