1. Identification

Product identifier: Marine Diesel

Other means of identification:
- SDS number: 107-GHS
- Synonyms: Marine Diesel Oil, Middle Distillate, Distilled Marine Diesel
  See section 16 for complete information.

Recommended use: Motor fuels. Heating fuels.

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer/Supplier: Valero Marketing & Supply Company and Affiliates
One Valero Way
San Antonio, TX 78269-6000
210-345-4593
CorpHSE@valero.com

Emergency Telephone:
- 24 Hour Emergency: 866-565-5220
- 1-800-424-9300 (CHEMTREC USA)

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 3

Health hazards:
- Acute toxicity, inhalation Category 4
- Skin corrosion/irritation Category 2
- Carcinogenicity Category 2
- Specific target organ toxicity, repeated exposure Category 2
- Aspiration hazard Category 1

Environmental hazards: Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards: Not classified.

Label elements

Signal word: Danger

Hazard statement: Flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. Suspected of causing cancer. May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Precautionary statement

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

Response: If skin irritation occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. If swallowed: Immediately call a poison center/doctor. Take off contaminated clothing and wash before reuse. In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
Storage
Store locked up. Store in a well-ventilated place. Keep cool.

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

Hazard(s) not otherwise classified (HNOC)
None known.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel fuel</td>
<td>68476-34-6</td>
<td>80 - &lt; 90</td>
</tr>
<tr>
<td>n-Nonane</td>
<td>111-84-2</td>
<td>0 - 3</td>
</tr>
<tr>
<td>n-Octane</td>
<td>111-65-9</td>
<td>0 - 3</td>
</tr>
<tr>
<td>Hexane (Other Isomers)</td>
<td>96-14-0</td>
<td>0 - 1</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>0 - 1</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>142-82-5</td>
<td>0 - 1</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>0 - 1</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation
Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Skin contact
Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

Eye contact
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Ingestion
Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

Hydrogen sulfide, a highly toxic gas, may be present. Signs and symptoms of overexposure to hydrogen sulfide include respiratory and eye irritation, dizziness, nausea, coughing, a sensation of dryness and pain in the nose, and loss of consciousness. Odor does not provide a reliable indicator of the presence of hazardous levels in the atmosphere.

Indication of immediate medical attention and special treatment needed
In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed. The toxicological properties of this material have not been fully investigated.

General information
If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media
Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes.

Special protective equipment and precautions for firefighters
Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire-fighting equipment/instructions

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Local authorities should be advised if significant spillages cannot be contained. Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.

Use non-sparking tools and explosion-proof equipment.

Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste.

Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.

Clean up in accordance with all applicable regulations.

Environmental precautions

If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.

7. Handling and storage

Precautions for safe handling

Wear personal protective equipment. Avoid breathing mists or vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling. The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>PEL</td>
<td>50 mg/m3</td>
</tr>
</tbody>
</table>
## US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane (CAS 142-82-5)</td>
<td>PEL</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2000 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>500 ppm</td>
</tr>
<tr>
<td>n-Hexane (CAS 110-54-3)</td>
<td>PEL</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td>n-Octane (CAS 111-65-9)</td>
<td>PEL</td>
<td>500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2350 mg/m³</td>
</tr>
</tbody>
</table>

## US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diesel fuel (CAS 68476-34-6)</td>
<td>TWA</td>
<td>100 mg/m³</td>
<td>Inhalable fraction and vapor.</td>
</tr>
<tr>
<td>Hexane (Other Isomers) (CAS 96-14-0)</td>
<td>STEL</td>
<td>1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>TWA</td>
<td>500 ppm</td>
<td></td>
</tr>
<tr>
<td>n-Heptane (CAS 142-82-5)</td>
<td>STEL</td>
<td>15 ppm</td>
<td></td>
</tr>
<tr>
<td>n-Hexane (CAS 110-54-3)</td>
<td>TWA</td>
<td>10 ppm</td>
<td></td>
</tr>
<tr>
<td>n-Nonane (CAS 111-84-2)</td>
<td>TWA</td>
<td>400 ppm</td>
<td></td>
</tr>
<tr>
<td>n-Octane (CAS 111-65-9)</td>
<td>TWA</td>
<td>50 ppm</td>
<td></td>
</tr>
</tbody>
</table>

## US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hexane (Other Isomers) (CAS 96-14-0)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>510 ppm</td>
</tr>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td>STEL</td>
<td>75 mg/m³</td>
</tr>
<tr>
<td>n-Heptane (CAS 142-82-5)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>440 ppm</td>
</tr>
<tr>
<td>n-Hexane (CAS 110-54-3)</td>
<td>TWA</td>
<td>180 mg/m³</td>
</tr>
<tr>
<td>n-Nonane (CAS 111-84-2)</td>
<td>TWA</td>
<td>1050 mg/m³</td>
</tr>
<tr>
<td>n-Octane (CAS 111-65-9)</td>
<td>Ceiling</td>
<td>1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>385 ppm</td>
</tr>
</tbody>
</table>

## Biological limit values

### ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components (CAS 110-54-3)</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Hexane</td>
<td>0.4 mg/l</td>
<td>2,5-Hexanedione, without hydrolysis</td>
<td>Urine</td>
<td></td>
</tr>
</tbody>
</table>
ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,5-Hexanedi-on, without hydrolysis</td>
<td>0.4 mg/l</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

- Benzene (CAS 71-43-2) Can be absorbed through the skin.
- n-Hexane (CAS 110-54-3) Can be absorbed through the skin.
- Toluene (CAS 108-88-3) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

- Toluene (CAS 108-88-3) Skin designation applies.

US ACGIH Threshold Limit Values: Skin designation

- Benzene (CAS 71-43-2) Can be absorbed through the skin.
- Diesel fuel (CAS 68476-34-6) Can be absorbed through the skin.
- Naphthalene (CAS 91-20-3) Can be absorbed through the skin.
- n-Hexane (CAS 110-54-3) Can be absorbed through the skin.

Individual protection measures, such as personal protective equipment

- Eye/face protection: Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.
- Skin protection:
  - Hand protection: Wear chemical-resistant, impervious gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable.
  - Other: Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.
- Respiratory protection:
  - Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.
- Thermal hazards: Wear appropriate thermal protective clothing, when necessary.
- General hygiene considerations: Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

- Appearance: Liquid (may be dyed red).
- Physical state: Liquid.
- Form: Liquid.
- Color: Clear. Straw.
- Odor: Kerosene (strong).
- Odor threshold: Not available.
- pH: Not available.
- Melting point/freezing point: -60 °F (-51.11 °C) Approximate.
- Initial boiling point and boiling range: 325 - 700 °F (162.78 - 371.11 °C)
- Flash point: > 100.0 °F (> 37.8 °C) Closed Cup
- Evaporation rate: Not available.
- Flammability (solid, gas): Not available.
Upper/lower flammability or explosive limits

- **Flammability limit - lower (%)**
  - 0.4 %
- **Flammability limit - upper (%)**
  - 8 %
- **Explosive limit - lower (%)**
  - Not available.
- **Explosive limit - upper (%)**
  - Not available.

- **Vapor pressure**
  - < 1 mm Hg (20°C)
- **Vapor density**
  - 3 (Air = 1)
- **Relative density**
  - Not available.
- **Solubility(ies)**
  - Solubility (water)
    - Not available.
  - Partition coefficient (n-octanol/water)
    - No data available.
- **Auto-ignition temperature**
  - 495 °F (257.22 °C)
- **Decomposition temperature**
  - Not available.
- **Viscosity**
  - Not available.

10. Stability and reactivity

- **Reactivity**
  - Stable at normal conditions.
- **Chemical stability**
  - Stable under normal temperature conditions and recommended use.
- **Possibility of hazardous reactions**
  - Hazardous polymerization does not occur.
- **Conditions to avoid**
  - Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
- **Incompatible materials**
  - Strong oxidizing agents.
- **Hazardous decomposition products**
  - No hazardous decomposition products are known.

11. Toxicological information

- **Information on likely routes of exposure**
  - **Ingestion**
    - May cause discomfort if swallowed.
  - **Inhalation**
    - Harmful if inhaled.
  - **Skin contact**
    - Causes skin irritation.
  - **Eye contact**
    - Direct contact with eyes may cause temporary irritation.
  - **Symptoms related to the physical, chemical and toxicological characteristics**

- **Information on toxicological effects**
  - **Acute toxicity**
    - Harmful if inhaled. Harmful: may cause lung damage if swallowed.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene (CAS 91-20-3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2 g/kg</td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>490 mg/kg</td>
</tr>
<tr>
<td>n-Heptane (CAS 142-82-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>103 mg/l, 4 Hours</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
n-Hexane (CAS 110-54-3)
  Acute
    Oral
    LD50 | Rat | 28710 mg/kg

n-Nonane (CAS 111-84-2)
  Acute
    Inhalation
    LC50 | Rat | 3200 mg/l, 4 Hours

n-Octane (CAS 111-65-9)
  Acute
    Inhalation
    LC50 | Rat | 118 mg/l, 4 Hours

Skin corrosion/irritation | Causes skin irritation.
Serious eye damage/eye irritation | Based on available data, the classification criteria are not met.

Respiratory or skin sensitization
  Respiratory sensitization | Not a respiratory sensitizer.
  Skin sensitization | Not a skin sensitizer.

Germ cell mutagenicity | No component of this product present at levels greater than or equal to 0.1% is identified as a mutagen by OSHA.

Carcinogenicity | Suspected of causing cancer. Diesel exhaust has been reported to be an occupational hazard due to NIOSH-reported potential carcinogenic properties.

IARC Monographs. Overall Evaluation of Carcinogenicity
  Benzene (CAS 71-43-2) | 1 Carcinogenic to humans.
  Diesel fuel (CAS 68476-34-6) | 3 Not classifiable as to carcinogenicity to humans.
  Naphthalene (CAS 91-20-3) | 2B Possibly carcinogenic to humans.
  Toluene (CAS 108-88-3) | 3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens
  Benzene (CAS 71-43-2) | Known To Be Human Carcinogen.
  Naphthalene (CAS 91-20-3) | Reasonably Anticipated to be a Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
  Benzene (CAS 71-43-2) | Cancer

Reproductive toxicity | Naphthalene interferes with embryo development in experimental animals at dose levels that cause maternal toxicity. In humans, excessive exposure to this agent may cause hemolytic anemia in the mother and fetus.

Specific target organ toxicity - single exposure | Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure | May cause damage to organs (blood, thymus, liver) through prolonged or repeated exposure.

Aspiration hazard | May be fatal if swallowed and enters airways.

Chronic effects | Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. Repeated exposure to naphthalene may cause cataracts, allergic skin rashes, destruction of red blood cells, and anemia, jaundice, kidney and liver damage. Danger of serious damage to health by prolonged exposure. Prolonged or repeated overexposure may cause central nervous system, kidney, liver, and lung damage.

Further information | Symptoms may be delayed.

12. Ecological information

Ecotoxicity | Toxic to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
</table>
| Naphthalene (CAS 91-20-3) | Aquatic
  Crustacea | EC50 | Water flea (Daphnia magna) | 1.09 - 3.4 mg/l, 48 hours |
| Fish | LC50 | Pink salmon (Oncorhynchus gorbuscha) | 0.95 - 1.62 mg/l, 96 hours |
Components | Species | Test Results
--- | --- | ---
n-Heptane (CAS 142-82-5) |  |  
   Aquatic | Fish | Western mosquitofish (Gambusia affinis)  4924 mg/l, 96 hours
n-Hexane (CAS 110-54-3) |  |  
   Aquatic | Fish | Fathead minnow (Pimephales promelas)  2.101 - 2.981 mg/l, 96 hours

Persistence and degradability  No data available.
Bioaccumulative potential  No data available.

Partition coefficient n-octanol / water (log Kow)  
Hexane (Other Isomers) (CAS 96-14-0) 3.6  
n-Heptane (CAS 142-82-5) 4.66  
n-Hexane (CAS 110-54-3) 3.9  
n-Nonane (CAS 111-84-2) 5.46  
n-Octane (CAS 111-65-9) 5.18

Mobility in soil  No data available.
Other adverse effects  No data available.

13. Disposal considerations

Disposal instructions  Contract with a disposal operator licensed by the Law on Disposal and Cleaning. This material and its container must be disposed of as hazardous waste. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not dispose of waste into sewer. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

Hazardous waste code  D001: Waste Flammable material with a flash point <140 °F

US RCRA Hazardous Waste U List: Reference  
Benzene (CAS 71-43-2)  U019  
Naphthalene (CAS 91-20-3)  U165  
Toluene (CAS 108-88-3)  U220

Waste from residues / unused products  Dispose of in accordance with local regulations.
Contaminated packaging  Offer rinsed packaging material to local recycling facilities.

14. Transport information

DOT  
UN number  UN1202  
UN proper shipping name  Diesel fuel  
Transport hazard class(es)  Combustible Liquid
   Class  -  
   Subsidiary risk  III  
   Packing group  -  
   Environmental hazards  -  
   Marine pollutant  Yes
Special precautions for user  Read safety instructions, SDS and emergency procedures before handling.
Special provisions  144, B1, IB3, T2, TP1
Packaging exceptions  150
Packaging non bulk  203
Packaging bulk  242

IATA  
UN number  UN1202  
UN proper shipping name  Diesel fuel  
Transport hazard class(es)  3
Subsidiary risk: -
Label(s): 3
Packing group: III
Environmental hazards: Yes
ERG Code: 3L
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

IMDG
UN number: UN1202
UN proper shipping name: DIESEL FUEL
Transport hazard class(es):
Class: 3
Subsidiary risk: -
Label(s): 3
Packing group: III
Environmental hazards: Marine pollutant: Yes
EmS: F-E, S-E
Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable. However, this product is a liquid and if transported in bulk covered under MARPOL 73/78, Annex I.

15. Regulatory information
US federal regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
n-Nonane (CAS 111-84-2) 1.0 % One-Time Export Notification only.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Benzene (CAS 71-43-2) Cancer
Central nervous system
Blood
Aspiration
Skin
Eye
Respiratory tract irritation
Flammability

CERCLA Hazardous Substance List (40 CFR 302.4)
Benzene (CAS 71-43-2) LISTED
Hexane (Other Isomers) (CAS 96-14-0) LISTED
Naphthalene (CAS 91-20-3) LISTED
n-Heptane (CAS 142-82-5) LISTED
n-Hexane (CAS 110-54-3) LISTED
n-Nonane (CAS 111-84-2) LISTED
n-Octane (CAS 111-65-9) LISTED
Toluene (CAS 108-88-3) LISTED

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
Yes

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>0 - 1</td>
</tr>
<tr>
<td>n-Hexane</td>
<td>110-54-3</td>
<td>0 - 1</td>
</tr>
</tbody>
</table>
Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**
- Benzene (CAS 71-43-2)
- Naphthalene (CAS 91-20-3)
- n-Hexane (CAS 110-54-3)
- Toluene (CAS 108-88-3)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**
- Not regulated.

**Safe Drinking Water Act (SDWA)**
- Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**
- Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**
- Toluene (CAS 108-88-3) 35 % weight/volumn

**DEA Exempt Chemical Mixtures Code Number**
- Toluene (CAS 108-88-3) 594

**US state regulations**

**WARNING:** This product contains chemicals known to the State of California to cause cancer.

**US. Massachusetts RTK - Substance List**
- Benzene (CAS 71-43-2)
- Hexane (Other Isomers) (CAS 96-14-0)
- Naphthalene (CAS 91-20-3)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- n-Nonane (CAS 111-84-2)
- n-Octane (CAS 111-65-9)
- Toluene (CAS 108-88-3)

**US. New Jersey Worker and Community Right-to-Know Act**
- Benzene (CAS 71-43-2)
- Diesel fuel (CAS 68476-34-6)
- Naphthalene (CAS 91-20-3)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- n-Nonane (CAS 111-84-2)
- n-Octane (CAS 111-65-9)
- Toluene (CAS 108-88-3)

**US. Pennsylvania Worker and Community Right-to-Know Law**
- Benzene (CAS 71-43-2)
- Diesel fuel (CAS 68476-34-6)
- Hexane (Other Isomers) (CAS 96-14-0)
- Naphthalene (CAS 91-20-3)
- n-Heptane (CAS 142-82-5)
- n-Hexane (CAS 110-54-3)
- n-Nonane (CAS 111-84-2)
- n-Octane (CAS 111-65-9)
- Toluene (CAS 108-88-3)

**US. Rhode Island RTK**
- Benzene (CAS 71-43-2)
- Naphthalene (CAS 91-20-3)
- n-Hexane (CAS 110-54-3)
- Toluene (CAS 108-88-3)

**US. California Proposition 65**

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**
- Benzene (CAS 71-43-2)
- Naphthalene (CAS 91-20-3)
- Toluene (CAS 108-88-3)

**International Inventories**

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)*</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 27-June-2013
Revision date 23-May-2014
Version # 02
Further information HMIS® is a registered trade and service mark of the NPCA.

NFPA Ratings

![NFPA Ratings](image)

References

- ACGIH
- EPA: AQUIRE database
- NLM: Hazardous Substances Data Base
- US. IARC Monographs on Occupational Exposures to Chemical Agents
- HSDB® - Hazardous Substances Data Bank
- IARC Monographs. Overall Evaluation of Carcinogenicity
- National Toxicology Program (NTP) Report on Carcinogens
- ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer

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