SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information
Product Name: Toluene Standard Fuel 93.4
Material: 1024370, 1024369, 1024368, 1024371

Use: Reference Fuel
Company: Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

Emergency telephone:
Health: 866.442.9628 (North America) 1.832.813.4984 (International)
Transport: CHEMTREC 800.424.9300 or 703.527.3887 (int'l)
Asia: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316
EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department: Product Safety and Toxicology Group
E-mail address: SDS@CPChem.com
Website: www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture
This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Emergency Overview

Danger
Form: Non-viscous   Physical state: Liquid   Color: Clear   Odor: Strong gasoline
OSHA Hazards: Flammable Liquid, Moderate skin irritant, Moderate eye irritant, Target Organ Effects, Reproductive hazard, Aspiration hazard

Classification: Flammable liquids, Category 2

SDS Number: 100000013850
Toluene Standard Fuel 93.4

Revision Date 2016-05-20

Skin irritation, Category 2
Eye irritation, Category 2A
Reproductive toxicity, Category 2
Specific target organ systemic toxicity - single exposure, Category 3, Central nervous system
Specific target organ systemic toxicity - repeated exposure, Category 2, Auditory organs
Aspiration hazard, Category 1

Labeling

Symbol(s): 

Signal Word: Danger

Hazard Statements: H225: Highly flammable liquid and vapor.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H361: Suspected of damaging fertility or the unborn child.
H373: May cause damage to organs (Auditory organs) through prolonged or repeated exposure.

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/fume/gas/mist/vapor/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/eye protection/face protection.
P281 Use personal protective equipment as required.

Response:
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P312 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.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.
**Toluene Standard Fuel 93.4**

**Carcinogenicity:**

**IARC**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**NTP**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**ACGIH**
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

---

**SECTION 3: Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>70 - 80</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>142-82-5</td>
<td>20 - 30</td>
</tr>
</tbody>
</table>

---

**SECTION 4: First aid measures**

**General advice**
Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

**If inhaled**
Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.

**In case of skin contact**
If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.

**In case of eye contact**
Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
SECTION 5: Firefighting measures

Flash point : 4 °C (39 °F)  
Method: closed cup estimated

Autoignition temperature : 528.9 °C (984.0 °F)

Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

Unsuitable extinguishing media : High volume water jet.

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection : Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products : Hydrocarbons. Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth,
SAFETY DATA SHEET

Toluene Standard Fuel 93.4

Version 1.9

Revision Date 2016-05-20

vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage

Handling

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary, but may not by themselves be sufficient. Review all operations, which have the potential to generating and accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106 "Flammable and Combustible Liquids"; National Fire Protection Association (NFPA 77), "Recommended Practice on Static Electricity"; and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and stray Currents".

Advice on protection against fire and explosion: Do not spray on an open flame or any other incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers: No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Control parameters</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>ACGIH</td>
<td>TWA</td>
<td>20 ppm,</td>
<td>visual impair, female repro, pregnancy loss, BEI, A4,</td>
</tr>
<tr>
<td>OSHA Z-2</td>
<td>TWA</td>
<td>200 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z-2</td>
<td>CEIL</td>
<td>300 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z-2</td>
<td>Peak</td>
<td>500 ppm,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z-1-A</td>
<td>TWA</td>
<td>100 ppm, 375 mg/m3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA Z-1-A</td>
<td>STEL</td>
<td>150 ppm, 560 mg/m3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n-Heptane</td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>500 ppm, 2,000 mg/m3</td>
<td>(b)</td>
</tr>
</tbody>
</table>

SDS Number:100000013850 5/16
Toluene Standard Fuel 93.4

Immediately Dangerous to Life or Health Concentrations (IDLH)

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Immediately Dangerous to Life or Health Concentration Value 500 ppm</td>
<td>1995-03-01</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>142-82-5</td>
<td>Immediately Dangerous to Life or Health Concentration Value 750 ppm</td>
<td>1995-03-01</td>
</tr>
</tbody>
</table>

Biological exposure indices

US

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Sampling time</th>
<th>Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>Toluene: 0.02 mg/l (in blood)</td>
<td>Prior to last shift of workweek</td>
<td>2010-03-01</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toluene: 0.03 mg/l (Urine)</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>2010-03-01</td>
</tr>
<tr>
<td>o-Cresol</td>
<td></td>
<td>o-Cresol: 0.3 mg/g (Urine)</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>2010-03-01</td>
</tr>
</tbody>
</table>

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the workplace when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection: Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection: The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time.
which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.

Hygiene measures: When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

### SECTION 9: Physical and chemical properties

#### Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Non-viscous</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Strong gasoline</td>
</tr>
</tbody>
</table>

**Safety data**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>4 °C (39 °F)</td>
</tr>
<tr>
<td>Method</td>
<td>closed cup estimated</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>1.1 %(V)</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>7.1 %(V)</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>no</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>528.9 °C (984.0 °F)</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>-94.44 °C (-137.99 °F)</td>
</tr>
<tr>
<td>Pour point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>99 °C (210 °F)</td>
</tr>
</tbody>
</table>
**SECTION 10: Stability and reactivity**

**Chemical stability**: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions**

**Conditions to avoid**: Avoid contact with strong oxidants. Heat, flames and sparks.

**Materials to avoid**: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Thermal decomposition**: No data available

**Hazardous decomposition products**: Hydrocarbons

**Carbon oxides**

**Other data**: No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

**Toluene Standard Fuel 93.4**

**Acute oral toxicity**: Acute toxicity estimate: > 5,000 mg/kg

Method: Expert judgment

**Toluene Standard Fuel 93.4**

**Acute inhalation toxicity**: Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Toluene Standard Fuel 93.4

**Acute dermal toxicity**
- Acute toxicity estimate: > 5,000 mg/kg
- Method: Expert judgment

**Skin irritation**
- Irritating to skin.
- May cause skin irritation in susceptible persons.

**Eye irritation**
- Eye irritation. Vapors may cause irritation to the eyes, respiratory system and the skin.
- May cause irreversible eye damage.

**Sensitization**
- Does not cause skin sensitization.
- Estimated based on individual component values.

**Repeated dose toxicity**

**Toluene**
- Species: Rat
- Application Route: Inhalation
- Dose: 0, 100, 625, 1250, 3000 ppm
- Exposure time: 15 wk
- Number of exposures: 6.5 h/d, 5 d/wk
- NOEL: 625 ppm

- Species: Mouse
- Application Route: Inhalation
- Dose: 0, 100, 625, 1250, 3000 ppm
- Exposure time: 14 wk
- Number of exposures: 6.5 h/d, 5 d/wk
- NOEL: 100 ppm

**n-Heptane**
- Species: Rat, male
- Sex: male
- Application Route: Inhalation
- Dose: 12.47 mg/l
- Exposure time: 16 wk
- Number of exposures: 12 h/d, 7 d/wk
- NOEL: 12.47 mg/l
- Remarks: No adverse effect has been observed in chronic toxicity tests.

**Carcinogenicity**

**Toluene**
- Species: Rat
- Dose: 0, 600, 1200 ppm
- Exposure time: 2 yrs
- Number of exposures: 6.5 h/d, 5 d/wk
- Remarks: No evidence of carcinogenicity
Toluene Standard Fuel 93.4

Species: Mouse
Dose: 0, 600, 1200 ppm
Exposure time: 2 yrs
Number of exposures: 6.5 h/d, 5 d/wk
Remarks: No evidence of carcinogenicity

Reproductive toxicity

Toluene
Species: Rat
Application Route: Inhalation
Dose: 0, 100, 500, 2000 ppm
Test period: 95 d
NOAEL Parent: 2000 ppm

n-Heptane
Species: Rat
Application Route: Inhalation
Dose: 0, 900, 3000, 9000 ppm
Number of exposures: 6 hr/d, 5 d/wk
Test period: 13 wk
Method: OECD Test Guideline 416
NOAEL Parent: 9000 ppm
NOAEL F1: 3000 ppm
NOAEL F2: 3000 ppm

Developmental Toxicity

Toluene
Species: Rat
Application Route: Inhalation
Dose: 0, 100, 500, 2000 ppm
Test period: 95 d
NOAEL Teratogenicity: 400-750 ppm

n-Heptane
Species: Rat
Application Route: Inhalation
Dose: 0, 900, 3000, 9000 ppm
Exposure time: GD6-15
Number of exposures: 6 hrs/d
NOAEL Teratogenicity: 9000 ppm
NOAEL Maternal: 3000 ppm

Toluene Standard Fuel 93.4
Aspiration toxicity
May be fatal if swallowed and enters airways.

CMR effects

Toluene
Carcinogenicity: Not classifiable as a human carcinogen.
Mutagenicity: Animal testing did not show any mutagenic effects.
Teratogenicity: Some evidence of adverse effects on development, based on animal experiments.
Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

n-Heptane
Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
Teratogenicity: Animal testing did not show any effects on fetal development.
**Reproductive toxicity:** No toxicity to reproduction

**Further information:**
Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

### SECTION 12: Ecological information

#### Toxicity to fish

<table>
<thead>
<tr>
<th>Substance</th>
<th>LC50</th>
<th>Exposure time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>18 - 36 mg/l</td>
<td>96 h</td>
<td>Pimephales promelas (fathead minnow)</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>1.284 mg/l</td>
<td>96 h</td>
<td>Oncorhynchus mykiss (rainbow trout) Method: QSAR</td>
</tr>
<tr>
<td></td>
<td>375 mg/l</td>
<td>96 h</td>
<td>Tilapia mosambica (Fish)</td>
</tr>
</tbody>
</table>

#### Toxicity to daphnia and other aquatic invertebrates

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50</th>
<th>Exposure time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>3.78 mg/l</td>
<td>48 h</td>
<td>Daphnia magna (Water flea)</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>1.5 mg/l</td>
<td>48 h</td>
<td>Daphnia magna (Water flea) static test Toxic to aquatic organisms.</td>
</tr>
<tr>
<td></td>
<td>0.1 mg/l</td>
<td>96 h</td>
<td>Mysidopsis bahia (mysid shrimp) semi-static test Very toxic to aquatic organisms.</td>
</tr>
</tbody>
</table>

#### Toxicity to algae

<table>
<thead>
<tr>
<th>Substance</th>
<th>EC50</th>
<th>Exposure time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>134 mg/l</td>
<td>72 h</td>
<td>Chlamydomonas angulosa (Green algae)</td>
</tr>
<tr>
<td>n-Heptane</td>
<td>4.338 mg/l</td>
<td>72 h</td>
<td>Pseudokirchneriella subcapitata (microalgae) Method: QSAR</td>
</tr>
</tbody>
</table>

#### Elimination information (persistence and degradability)

<table>
<thead>
<tr>
<th>Biodegradability</th>
<th>Expected to be biodegradable</th>
</tr>
</thead>
</table>
Ecotoxicology Assessment

Acute aquatic toxicity
Toluene : Toxic to aquatic life.
n-Heptane : Very toxic to aquatic life.

Chronic aquatic toxicity
Toluene : Harmful to aquatic life with long lasting effects.
n-Heptane : Very toxic to aquatic life with long lasting effects.

Results of PBT assessment
Toluene : Non-classified vPvB substance, Non-classified PBT substance
n-Heptane : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)
UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, MARINE POLLUTANT, (HEPTANE)
**IMDG / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)**
UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II, (4 °C), MARINE POLLUTANT, (HEPTANE)

**IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)**
UN1268, PETROLEUM DISTILLATES, N.O.S., 3, II

**ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))**
UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (HEPTANE)

**RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))**
UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (HEPTANE)

**ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)**
UN1268, PETROLEUM PRODUCTS, N.O.S., 3, II, ENVIRONMENTALLY HAZARDOUS, (HEPTANE)

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### SECTION 15: Regulatory information

**National legislation**

| SARA 311/312 Hazards | Fire Hazard  
|                       | Acute Health Hazard  
| CERCLA Reportable Quantity | 1272 lbs  
| Toluene  
| SARA 302 Reportable Quantity | This material does not contain any components with a SARA 302 RQ.  
| SARA 302 Threshold Planning Quantity | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.  
| SARA 304 Reportable Quantity | This material does not contain any components with a section 304 EHS RQ.  

SDS Number:100000013850  
13/16
## Toluene Standard Fuel 93.4

<table>
<thead>
<tr>
<th>SARA 313 Ingredients</th>
<th>The following components are subject to reporting levels established by SARA Title III, Section 313:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene - 108-88-3</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

**Clean Air Act**

**Ozone-Depletion Potential**: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

- Toluene - 108-88-3

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

- Toluene - 108-88-3

**US State Regulations**

**Pennsylvania Right To Know**: n-Heptane - 142-82-5  
Toluene - 108-88-3

**New Jersey Right To Know**: n-Heptane - 142-82-5  
Toluene - 108-88-3

**California Prop. 65 Ingredients**: WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

**Notification status**

- **Europe REACH**: On the inventory, or in compliance with the inventory
- **United States of America TSCA**: On the inventory, or in compliance with the inventory
- **Canada DSL**: On the inventory, or in compliance with the inventory
- **Australia AICS**: On the inventory, or in compliance with the inventory
- **New Zealand NZIoC**: On the inventory, or in compliance with the inventory
- **Japan ENCS**: On the inventory, or in compliance with the inventory
- **Korea KECI**: On the inventory, or in compliance with the inventory
- **Philippines PICCS**: On the inventory, or in compliance with the inventory
- **China IECSC**: On the inventory, or in compliance with the inventory
NFPA Classification: Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0

Further information
Legacy SDS Number: 26600

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

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

<table>
<thead>
<tr>
<th>Key or legend to abbreviations and acronyms used in the safety data sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH: American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>AICS: Australia, Inventory of Chemical Substances</td>
</tr>
<tr>
<td>DSL: Canada, Domestic Substances List</td>
</tr>
<tr>
<td>NDSL: Canada, Non-Domestic Substances List</td>
</tr>
<tr>
<td>CNS: Central Nervous System</td>
</tr>
<tr>
<td>CAS: Chemical Abstract Service</td>
</tr>
<tr>
<td>EC50: Effective Concentration</td>
</tr>
<tr>
<td>EC50: Effective Concentration 50%</td>
</tr>
<tr>
<td>EGEST: EOSCA Generic Exposure Scenario Tool</td>
</tr>
<tr>
<td>EOSCA: European Oilfield Specialty Chemicals Association</td>
</tr>
<tr>
<td>EINECS: European Inventory of Existing Chemical Substances</td>
</tr>
<tr>
<td>MAK: Germany Maximum Concentration Values</td>
</tr>
<tr>
<td>GHS: Globally Harmonized System</td>
</tr>
<tr>
<td>&gt;=: Greater Than or Equal To</td>
</tr>
<tr>
<td>IC50: Inhibition Concentration 50%</td>
</tr>
<tr>
<td>IARC: International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IECSC</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>ENCS</td>
</tr>
<tr>
<td>KECl</td>
</tr>
<tr>
<td>&lt;=</td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>