## SAFETY DATA SHEET

Heptane (19043)



## **Section 1. Identification**

**GHS** product identifier

: Heptane (19043)

**Chemical name** 

: Naphtha (petroleum), hydrotreated light

**Synonyms** 

: Petroleum hydrocarbon solvent;

Commercial Heptane; C7-rich Solvent;

CITGO® Material Code No.: 19043

**Material uses** 

: Hydrocarbon Solvent

Code

: 19043

MSDS#

: 19043

Supplier's details

: CITGO Petroleum Corporation

Lemont Refinery

135th Street & New Avenue

Lemont, IL 60439 custsol@citgo.com

Emergency telephone number (with hours of operation)

: Technical Contact: (630) 257-4112

(800) 967-7601 (8am - 4pm CT M-F)

Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300

(United States Only)

## Section 2. Hazards identification

**OSHA/HCS** status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 2 SKIN IRRITATION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

ASPIRATION HAZARD - Category 1

**GHS label elements** 

Hazard pictograms







Signal word

Danger

**Hazard statements** 

: Highly flammable liquid and vapor.

Causes skin irritation.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

**Precautionary statements** 

**General** 

: Not applicable.

**Prevention** 

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor.

Wash hands thoroughly after handling.

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## Section 2. Hazards identification

### Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention.

**Storage Disposal**  : Store locked up. Store in a well-ventilated place. Keep cool.

Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire or explosion. Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

Substance/mixture

Chemical name

: Substance

Naphtha (petroleum), hydrotreated light

Other means of identification

: Petroleum hydrocarbon solvent; Commercial Heptane;

C7-rich Solvent:

CITGO® Material Code No.: 19043

### **CAS** number/other identifiers

**CAS** number 64742-49-0

| Ingredient name    | %                   | CAS number |
|--------------------|---------------------|------------|
| C7-C8 Alkanes      | 60 - 100            | **         |
| C7-C8 Cycloalkanes | <sup>l</sup> 5 - 10 | **         |

<sup>\* =</sup> Various \*\* = Mixture \*\*\* = Proprietary

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### **Description of necessary first aid measures**

**Eye contact** 

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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## Section 4. First aid measures

### Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact**: No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

pain or irritation

watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

**Ingestion** : Adverse symptoms may include the following:

nausea or vomiting

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by cuffed endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

**Specific treatments** 

: Treat symptomatically and supportively.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

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## Section 5. Fire-fighting measures

### **Extinguishing media**

Suitable extinguishing media

: Use caution when applying carbon dioxide in confined spaces. SMALL FIRE: Steam, CO<sub>2</sub>, dry chemical or inert gas (e.g., nitrogen). LARGE FIRE: Use foam, water fog or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, ignition or explosion.

# Unsuitable extinguishing media

: Do not use water jet.

# Specific hazards arising from the chemical

: Highly flammable liquid and vapor. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

# Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide

# Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

# Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

### For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### **Environmental precautions**

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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## Section 6. Accidental release measures

### Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

#### **Protective measures**

: Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Non equilibrium conditions may increase the fire hazard associated with this product. Always bond receiving containers to the fill pipe before and during loading. Always confirm that receiving container is properly grounded. Bonding and grounding alone may be inadequate to eliminate fire and explosion hazards. Carefully review operations that may increase the risks such as tank and container filling, tank cleaning, sampling, gauging, loading, filtering, mixing, agitation, etc. In addition to bonding and grounding, efforts to mitigate the hazards may include, but are not limited to, ventilation, inerting and/or reduction of transfer velocities. Always keep nozzle in contact with the container throughout the loading process. Do NOT fill any portable container in or on a vehicle.

### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## including any incompatibilities

**Conditions for safe storage**, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container, keep closed in a secure location.

> Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

## Section 8. Exposure controls/personal protection

**Control parameters** 

Occupational exposure limits

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## Section 8. Exposure controls/personal protection

| Ingredient name    | Exposure limits                      |
|--------------------|--------------------------------------|
| C7-C8 Alkanes      | ACGIH TLV (United States).           |
|                    | TWA: 1500 mg/m <sup>3</sup>          |
| C7-C8 Cycloalkanes | None.                                |
| Heptane            | ACGIH TLV (United States, 3/2015).   |
|                    | TWA: 400 ppm 8 hours.                |
|                    | TWA: 1640 mg/m <sup>3</sup> 8 hours. |
|                    | STEL: 500 ppm 15 minutes.            |
|                    | STEL: 2050 mg/m³ 15 minutes.         |
|                    | NIOSH REL (United States, 10/2013).  |
|                    | TWA: 85 ppm 10 hours.                |
|                    | TWA: 350 mg/m <sup>3</sup> 10 hours. |
|                    | CEIL: 440 ppm 15 minutes.            |
|                    | CEIL: 1800 mg/m³ 15 minutes.         |
|                    | OSHA PEL (United States, 2/2013).    |
|                    | TWA: 500 ppm 8 hours.                |
|                    | TWA: 2000 mg/m³ 8 hours.             |

Heptane (19043)

### **ACGIH TLV (United States)**

342 ppm (1400 mg/m<sup>3</sup>) 8 hour(s)

Notes: The TLV for the hydrocarbon solvent is based on the procedure described in Appendix H ("Reciprocal Calculations Method for Certain Refined Hydrocarbon Solvent Vapors") of the ACGIH TLVs ® and BEIs® guidelines. The GGVmixture (ACGIH TLV) is based on Column B (McKee et al., 2005) of Table 1 ("Group Cuidence Values") of Appendix H

Guidance Values") of Appendix H.

# Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

# **Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.

# Skin protection Hand protection

: Avoid skin contact with liquid. Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: Heavy duty, industrial grade chemically resistant gloves constructed of nitrile, neoprene, polyethylene, fluoroelastomer rubber or polyvinyl chloride as approved by glove manufacturer. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove

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## Section 8. Exposure controls/personal protection

manufacturers. Leather gloves are not protective for liquid contact.

Body protection: Avoid skin contact with liquid. Personal protective equipment for the

: Avoid skin contact with liquid. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Other skin protection : Avoid skin contact with liquid. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved

and should be approved by a specialist before handling this product. Leather boots are

not protective for liquid contact.

Respiratory protection : Avoid inhalation of gases, vapors, mists or dusts. Use a properly fitted, air-purifying or

supplied-air 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 an air purifying respirator is appropriate, use one equipped with cartridges

rated for organic vapors.

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Liquid.

**Color** : Transparent, colorless.

Odor : Characteristic hydrocarbon solvent odor.

pH : Not available.

**Boiling point** : 93 to 99°C (199.4 to 210.2°F)

Flash point : Closed cup: -9°C (15.8°F) [Tagliabue (ASTM D-56)]

**Evaporation rate** : 4.5 (n-butyl acetate. = 1)

Lower and upper explosive

(flammable) limits

: Lower: 1% Upper: 6.7%

**Vapor pressure** : 6 kPa (45 mm Hg) [room temperature]

Vapor density : 3 [Air = 1]

Relative density : 0.7

Density lbs/gal : 5.8 lbs/gal

Gravity, °API : Estimated 71 @ 60 F

**Solubility** : Insoluble in the following materials: cold water.

**Auto-ignition temperature** : 246°C (474.8°F)

**Conductivity** : <5 picosiemens/meter (unadditized)

## Section 10. Stability and reactivity

Reactivity: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

**Chemical stability**: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. Do not store with strong oxidizing

agents.

**Incompatible materials**: Reactive or incompatible with the following materials:

oxidizing materials

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## Section 10. Stability and reactivity

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should

: **Heptane**: Heptane is a CNS depressant and narcosis at elevated concentrations.

not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

### **Acute toxicity**

Not available.

Conclusion/Summary Irritation/Corrosion

Not available.

Skin: No additional information.Eyes: No additional information.Respiratory: No additional information.

**Sensitization** 

Not available.

Skin: No additional information.Respiratory: No additional information.

**Mutagenicity** 

Not available.

**Conclusion/Summary** 

**Carcinogenicity** 

Not available.

: **Heptane**: n-heptane was not mutagenic in the Salmonella/microsome (Ames) assay.

Conclusion/Summary

**Reproductive toxicity** 

Not available.

: No additional information.

**Conclusion/Summary** 

Teratogenicity

Not available.

: No additional information.

Conclusion/Summary

clusion/Summary : No additional information.

### Specific target organ toxicity (single exposure)

| Name                                |     | Route of exposure | Target organs                        |
|-------------------------------------|-----|-------------------|--------------------------------------|
| C7-C8 Alkanes<br>C7-C8 Cycloalkanes | 0 , |                   | Narcotic effects<br>Narcotic effects |

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

| Name | Result   |
|------|--|
|      | ASPIRATION HAZARD - Category 1<br>ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

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## Section 11. Toxicological information

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

**Skin contact**: Causes skin irritation. Defatting to the skin.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact**: Adverse symptoms may include the following:

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact**: Adverse symptoms may include the following:

irritation redness dryness cracking

**Ingestion**: Adverse symptoms may include the following:

nausea or vomiting

### Delayed and immediate effects and also chronic effects from short and long term exposure

**Short term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

**Long term exposure** 

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

## **Section 12. Ecological information**

### **Toxicity**

Not available.

**Conclusion/Summary**: Not available.

Persistence and degradability

**Conclusion/Summary** : Readily biodegradable

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## Section 12. Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis       | Biodegradability |  |
|-------------------------|-------------------|------------------|------------------|--|
| Heptane (19043)         | -                 | 70%; < 28 day(s) | Readily          |  |

### **Bioaccumulative potential**

Not available.

**Mobility in soil** 

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** 

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

RCRA classification : D001, D018

## Section 14. Transport information

|                            | DOT Classification  | IMDG  | IATA   |
|----------------------------|---|---|--|
| UN number                  | UN1206  | UN1206  | UN1206   |
| UN proper shipping name    | UN1206, Heptanes, 3, PG II,<br>Marine Pollutant.  | UN1206, Heptanes, 3, PG II,<br>Marine Pollutant.                                      | UN1206, Heptanes, 3, PG II,<br>Marine Pollutant.   |
| Transport hazard class(es) | 3   | 3   | 3  |
| Packing group              | II  | II  | II   |
| Environmental hazards      | Yes.  | Yes.  | Yes.   |
| Additional information     | This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in nonbulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173. 24a. | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

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## Section 14. Transport information

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according

to Annex II of MARPOL and

the IBC Code

: Not available.

## Section 15. Regulatory information

U.S. Federal regulations

: United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Toluene; Ethylbenzene; Benzene; Naphthalene

Clean Water Act (CWA) 311: Cyclohexane; Toluene; Ethylbenzene; Benzene;

Naphthalene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

### **SARA 302/304**

Composition/information on ingredients

SARA 304 RQ : Not applicable.

**SARA 311/312** 

Classification : Fire hazard

Immediate (acute) health hazard

### **Composition/information on ingredients**

| Name Fir ha                              | Sudden<br>release of<br>pressure | Reactive   | Immediate<br>(acute)<br>health<br>hazard | Delayed<br>(chronic)<br>health<br>hazard |
|--|----------------------------------|------------|--|--|
| C7-C8 Alkanes Yes C7-C8 Cycloalkanes Yes | No.<br>No.                       | No.<br>No. | Yes.<br>Yes.                             | No.<br>No.                               |

### **State regulations**

Massachusetts : The following components are listed: HEPTANE (N-HEPTANE)

New York : None of the components are listed.

New Jersey : The following components are listed: n-HEPTANE; HEPTANE

Pennsylvania : The following components are listed: HEPTANE

### California Prop. 65

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer. **WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

| Ingredient name | %      | Cancer | Reproductive | No significant risk level                          | Maximum acceptable dosage level    |
|-----------------|--------|--------|--------------|--|------------------------------------|
| Toluene         | <0.1   | No.    | Yes.         | No.  | 7000 μg/day<br>(ingestion)         |
| Ethylbenzene    | <0.001 | Yes.   | No.          | 41 μg/day (ingestion)<br>54 μg/day<br>(inhalation) | No.                                |
| Cumene          | <0.001 | Yes.   | No.          | No.  | No.                                |
| Benzene         | <0.001 | Yes.   | Yes.         | 6.4 μg/day<br>(ingestion)<br>13 μg/day             | 24 μg/day (ingestion)<br>49 μg/day |

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## Section 15. Regulatory information

|             |         |      |     | (inhalation) | (inhalation) |  |
|-------------|---------|------|-----|--------------|--------------|--|
| Naphthalene | <0.0001 | Yes. | No. | Yes.         | No.          |  |

### International regulations

WHMIS (Canada) : Class B-2: Flammable liquid

Class D-2B: Material causing other toxic effects (Toxic).

### **International lists**

**National inventory** 

United States
All components are listed or exempted.
Canada
China
Europe
All components are listed or exempted.
All components are listed or exempted.
All components are listed or exempted.
Europe
All components are listed or exempted.

Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

Malaysia : All components are listed or exempted.
 New Zealand : All components are listed or exempted.
 Philippines : All components are listed or exempted.
 Republic of Korea : All components are listed or exempted.
 Taiwan : All components are listed or exempted.

Turkey : Not determined.

## **Section 16. Other information**

### **National Fire Protection Association (U.S.A.)**



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### Procedure used to derive the classification

| Classification                            | Justification         |
|---|-----------------------|
| FLAMMABLE LIQUIDS - Category 2            | On basis of test data |
| SKIN IRRITATION - Category 2              | Calculation method    |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE    | Calculation method    |
| EXPOSURE) (Narcotic effects) - Category 3 |                       |
| ASPIRATION HAZARD - Category 1            | Expert judgment       |

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### Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

**UN = United Nations** 

Indicates information that has changed from previously issued version.

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