
MATERIAL SAFETY DATA SHEET

Diisobutylene

ISSUE DATE: July 21, 2000

Emergency Phone Number: (713)475-7771

LAST REVISION: December 5, 2002

CHEMTREC (800)424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: DiisobutyleneChemical Name: 2,4,4, trimethylpentene-1&2Manufacturer: Texas Petrochemicals LP
8600 Park Place Blvd.
Houston, Texas 77017Synonyms: diisobutene, DIB

2. COMPOSITION/INFORMATION ON INGREDIENTS

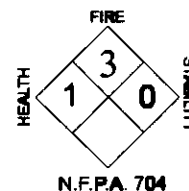
| <u>Component</u> | <u>CAS Reg. No.:</u> | <u>Weight %:</u> |
|--|----------------------|------------------|
| 2,4,4, trimethylpentene-1 | 107-39-1 | 80.2 |
| 2,4,4, trimethylpentene-2 | 107-40-4 | 19.4 |
| C ₈ - C ₁₂ Olefins | (Mixture) | 0.4 |

Compositions given are typical values, not specifications.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

- Clear, colorless liquid with distinctive turpentine-like odor.
- Extremely flammable liquid.
- Irritant to eyes, skin, mucous membrane and gastric system.
- Narcotic effects at high concentrations.

Eye Contact: Liquid and vapors may cause irritation to the eyes.Skin Contact: Liquid may cause skin irritation and drying due to de-fatting of the skin.Inhalation: Inhalation of vapors may cause irritation to the respiratory tract and to other mucous membranes. Inhalation may cause nausea and headache. High concentrations may result in narcosis and/or unconsciousness.Ingestion: May cause nausea, vomiting, and irritation to the digestive tract.Chronic Effects: May cause dermatitis from skin contact. Central nervous system effects and irritation of the eyes and respiratory tract can result from prolonged exposure.

4. FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with water for at least 20 minutes. Seek medical attention.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly cleanse the entire contaminated area of the body with soap and water.
- Inhalation:** If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.
- Ingestion:** DO NOT INDUCE VOMITING! Obtain medical attention immediately. Small amounts of the liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary edema.
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5. FIRE FIGHTING MEASURES

Flash Point: °F

Less than 20°

Flammability Limits

(Vol. % in Air)

Lower: 1.0

Upper: 7.0

Auto Ignition Temperature: 716°F

Fire Hazards

Vapors are heavier than air and may flow along surface to distant ignition sources and flash back. Vapors may form explosive mixture with air. Closed containers exposed to heat may explode.

Extinguishing Media

Carbon dioxide, dry chemical, foam

Fire Fighting Procedures

Cool adjacent structures with water to protect and prevent ignition. For unignited spill, see Section 6. Firefighting personnel should wear full turnout gear and a positive pressure self-contained breathing apparatus (SCBA).

Hazardous Combustion Products

Carbon monoxide, carbon dioxide

6. ACCIDENTAL RELEASE MEASURES

Shut off all ignition sources; no flares, smoking or flames in the hazard area. Do not touch or walk through spilled material. Stop the leak if you can do so without risk.

Small Spill: Absorb spilled material with vermiculite, absorbent pads, etc. Place in a sealed container for later disposal.

Large Spill: Dike far ahead of liquid spills to contain for later disposal. Keep runoff from entering sewers and/or ditches that lead to waterways. Apply a blanket of vapor suppressing hazardous materials foam or aqueous film forming foam to the spill surface to minimize fire potential. Use proper grounding and bonding techniques when transferring the spilled liquid to prevent ignition from static charges. Consult the appropriate regulatory agencies for reporting and disposal requirements.

7. HANDLING AND STORAGE

Handling: Use in a well ventilated area. Avoid eye and skin contact, and inhalation of vapors. See Section 8 for personal protective equipment recommendations. Properly bond an/or ground hoses and equipment used in transferring this product to prevent ignition from static electrical charge. Use spark proof tools and explosion resistant equipment. Treat empty containers with full precautions due to residual combustible liquids and vapors. Avoid contact with oxidizers.

Storage: Store in a cool, dry, well ventilated, flammable liquid storage cabinet. Keep away from flames and heat sources. Storage tanks should be of the floating roof type or product should be stored with an inert head space if tank does not have a floating roof. Consult NFPA 30 for specific guidance.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits

There are no established exposure limits for the components of this mixture.

Exposure Control: Process enclosures, closed systems, and local exhaust ventilation should be used to control exposures. Ventilation systems should have explosion proof equipment. Never use this product in closed or confined spaces without ventilation. For spills or fires involving this product, always approach from upwind/uphill. Safety showers and eye wash stations should be located near areas with splash hazards.

Personal Protection

Eye Protection: In addition to safety glasses, full faceshields and/or chemical splash goggles should be worn depending on the task.

Skin Protection: Gloves, aprons, and chemical resistant garments should be selected with regard to the task to be performed and the hazard potential for skin contact. In general, garments and gloves made from PVC, nitrile or rubber that have substantial thickness should be suitable for incidental splash protection. End users are strongly urged to consult glove/garment manufactures for specific guidance. Clothing contaminated with this product should be removed and laundered at an appropriate industrial laundry facility.

Respiratory Protection: Air purifying respirators with organic vapor cartridges may be used if the airborne concentration of the chemical is known. Refer to NIOSH's Respirator Decision Logic or the respirator manufacturer for specific guidance on the specific type of respirator to use. For fires, spills, or situations where the airborne concentration of the chemical is unknown, use a NIOSH approved, positive pressure self-contained breathing apparatus (SCBA).

9. PHYSICAL AND CHEMICAL PROPERTIES

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|--------------------------|-----------------------------|------------------------------|-----------------|
| <u>Physical Form:</u> | Clear liquid | <u>Odor:</u> | Turpentine-like |
| <u>Boiling Point:</u> | 212° – 221°F | <u>Melting Point:</u> | -160°F |
| <u>Ph:</u> | Not applicable | <u>Solubility in Water:</u> | Insoluble |
| <u>Specific Gravity:</u> | 0.72 (H ₂ O = 1) | <u>Vapor Density:</u> | 4.0 (Air = 1) |
| <u>Vapor Pressure:</u> | 68.4 mmHg @ 95°F (35°C) | <u>Molecular Weight:</u> | 112.1 |
| <u>Evaporation Rate:</u> | Not determined | <u>% Volatile by Weight:</u> | 100 |

10. STABILITY AND REACTIVITY

Stability: Stable

Reactivity: Can react vigorously with strong oxidizers.

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

This product has not been tested as a whole. The following is information for one of the components of the mixture.

2,4,4, trimethylpentenes:

LD50: (Oral-rat) - over 2,500 mg/kg

LC50: (Inhalation - Rat) - over 4,900 PPM (20 hours)

2, 4,4, trimethylpentenes have been shown to produce narcotic effects following exposure to high airborne concentrations. It is an irritant to the eyes, skin, respiratory system, and gastrointestinal tract. Past animal studies have shown evidence of liver and kidney damage upon exposure to 2,4,4, trimethylpentenes.

12. ECOLOGICAL INFORMATION

Data not available

13. DISPOSAL CONSIDERATIONS

The user of this product is urged to consult local, state, and federal regulatory agency guidelines regarding proper disposal.

14. TRANSPORTATION INFORMATION

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|------------------------------|-----------------------------------|
| <u>D.O.T. Shipping Name:</u> | Diisobutylene, Isomeric Compounds |
| <u>D.O.T. Hazard Class:</u> | 3 |
| <u>Packing Group:</u> | II |
| <u>U.N. Number:</u> | UN 2050 |

15. REGULATORY INFORMATION

OSHA: This product is hazardous according to 29 CFR 1910.1200 Federal OSHA Hazard Communication Standard.

EPA:

SARA Title III: Not on extremely hazardous substance list, section 302/304. Subject to provisions of Section 311 and 312.

SARA Section 312 Hazard Class – Fire, Acute

CERCLA: Reportable quantity: 100 pounds based on hazardous substance classification.

16. OTHER INFORMATION

The information presented herein is to the best of the company's knowledge true and reliable. This information is supplied for informational purposes only, and without any guarantee or warranty, expressed or implied, regarding its accuracy, correctness, or completeness. Since the actual use of the product by others is beyond our control, Texas Petrochemicals LP assumes no responsibility or liability for loss, damage, or expense arising out of any use by others of the products referred to herein.

Sections updated in this revision: 3