



Krasol® LBH 2000

Safety Data Sheet

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Section 1: Identification

1.1. Product identifier

Product form : Substance
Product Identifier(s) : Krasol® LBH 2000
CAS-No. : Trade Secret

1.2. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Elastomers

1.3. Details of the supplier of the safety data sheet

TotalEnergies Petrochemicals & Refining USA, Inc.
Cray Valley Division
PO Box 674411
Houston, TX 77267-4411

For non-emergency product information:
Phone: 713-483-5000 or 1-877-871-2729
Email: product.stewardship@totalenergies.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (Toll Free USA & Canada) / 703-527-3887 (Multiple languages)
TotalEnergies Petrochemicals & Refining USA, Inc.: 1-800-322-3462 (Language: English only)

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Not classified

2.2. Label elements

GHS US labeling

Hazard statements (GHS-US) : **This material has no classified hazards under 29 CFR 1910.1200.**
Precautionary statements (GHS-US) : Precautionary statements not required. Consult the SDS for additional safety information.

2.3. Hazards not otherwise classified

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

2.5. Additional information

Based on conditions common to industrial workplace use of this product : Contact with skin or eyes with hot material may cause serious thermal burns.
Vapors formed when material is processed at high temperatures may be irritating to the eyes and upper respiratory tract.

Section 3: Composition/Information on ingredients

3.1. Substance

Substance type : Polymer
Name : Krasol® LBH 2000
CAS-No. : Trade Secret

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Chemical name : Hydroxy-terminated polybutadiene

The specific chemical identity is being withheld as a trade secret.

3.2. Mixture

Not applicable

Section 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. Heated Material: For serious burns from heated material, get medical attention. In case of skin contact, immediately immerse in or flush with clean, cold water. Do not remove clothing adhering to the skin.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking, tears or redness persist. Heated Material: For serious burns from heated material, get medical attention. In case of contact with the eyes : Rinse immediately with plenty of water for 15 minutes.
- First-aid measures after ingestion : Rinse mouth out with water. If necessary seek medical advice.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray or fog. Carbon dioxide. Foam. Dry chemical. Dry powder. Sand.
- Unsuitable extinguishing media : Use of heavy stream of water may spread fire.

5.2. Special hazards arising from the chemical

- Fire hazard : Heat from fire can generate flammable vapor.
- Explosion hazard : Not expected to be a explosion hazard under normal conditions of use.
- Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Toxic fumes. 1,3-butadiene. Hydrocarbons.

5.3. Advice for firefighters

- Firefighting instructions : Fight fire from safe distance and protected location. Avoid direct personal contact with liquid even after fire is out to prevent potentially serious burns. Use water spray or fog for cooling exposed containers. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Complete protective clothing. Self-contained breathing apparatus.
- Other information : Fires are typically very smoky.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- Emergency procedures for non-emergency personnel : Ensure adequate ventilation. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures for emergency responders : No additional requirement.

6.2. Methods and material for containment and cleaning up

- For containment : Take up liquid spill into absorbent material, e.g.: sand, earth, vermiculite. Keep recovered product for subsequent disposal.
- Methods for cleaning up : Wash away residue with large amounts of water. Gather the product and place it in a spare container that has been suitably labeled.

6.3. Reference to other sections

See section 8. Exposure controls/personal protection.

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Section 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid all contact with skin, eyes, or clothing. Wear personal protective equipment. Avoid contact with elevated temperature or molten product to prevent burns. If heating is necessary for drummed product, loosen or remove bung or lid before warming/heating product to avoid overpressurization in the drum. If frozen, thaw and mix thoroughly before use.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Containers which are opened should be properly resealed and kept upright to prevent leakage.
- Storage conditions : Keep container tightly closed. Protect from freezing. Store in a dry, cool area. Keep away from sources of ignition.
- Incompatible materials : Strong acids. Strong oxidizing agents. Strong reducing agents. Peroxides.
- Storage temperature : 10 – 32 °C

Section 8: Exposure controls/personal protection

8.1. Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV, or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

No additional information available

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Safety shower. Eye fountain.
- Hand protection : Impermeable protective gloves. nitrile rubber gloves. Do not use natural rubber gloves. Product used with solvents : wear thick (> 0.5 mm) nitrile gloves. Replace gloves immediately when torn or any change in appearance (dimension, color, flexibility, etc.) is noticed.
- Eye protection : Safety glasses with side shields.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Color : Colorless.
- Odor : characteristic.
- Odor threshold : No data available
- pH : Not applicable
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : No data available
- Initial boiling point and boiling range : No data available
- Flash point : ≥ 280 °C (estimated value)
- Auto-ignition temperature : No data available
- Decomposition temperature : > 350 °C
- Flammability (solid, gas) : No data available
- Vapor pressure : No data available
- Relative vapor density at 20 °C : No data available
- Relative density : 0.9
- Solubility : No data available
- Partition coefficient n-octanol/water (Log Kow) : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : 5000 – 50000 mPa.s
- Explosion limits : No data available

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9.2. Other information

Explosive properties : Not expected to be a explosion hazard under normal conditions of use.

Section 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under use and storage conditions as recommended in section 7.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Direct sunlight. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents. Strong reducing agents. Peroxides.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure	: Inhalation. Ingestion. Skin and eye contact.
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Not classified Practically non-irritating (rabbit) (Results obtained on a similar product)
Serious eye damage/irritation	: Not classified Not irritating (rabbit) (Results obtained on a similar product)
Respiratory or skin sensitization	: Not classified Does not cause cutaneous sensitization for guinea-pigs (Results obtained on a similar product)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

Section 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

Section 13: Disposal considerations

13.1. Waste treatment methods

- | | |
|--|---|
| Waste treatment methods | : Transfer to a safe disposal area in accordance with federal, state, and local regulations. |
| Product/Packaging disposal recommendations | : Dispose of contents and container in accordance with all local, regional, national and international regulations. |

Section 14: Transport information

US Transport (DOT) for Bulk Shipments (Non-Bulk Shipments May Differ)

Not regulated by US DOT

Transport by sea (IMDG)

Not regulated by IMDG

Air transport (IATA)

Not regulated by IATA

Section 15: Regulatory information

15.1. US Federal regulations

EPA TSCA Status

All components of this product are listed or exempt from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Active inventory. This product has no special requirements under TSCA, such as significant new use rules (SNUR), consent orders, test rules, or sections 4, 5, 6, 8(a), 8(d), 12(b) requirements.

SARA Section 313 Supplier Notification

This product contains no toxic chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311/312 Hazard Classes Not applicable

Export Control Statement: This product is controlled under Export Control Classification Number 1C111. The product may not be exported from the European Union without a license from the relevant authority(ies). A license is required from the U.S. Department of Commerce in order to export, or re-export, this product from the United States. Diversion contrary to law is prohibited.

Export Control Classification Number (ECCN): 1C111

15.2. International regulations

CANADA

Krasol® LBH 2000 (Trade Secret)

WHMIS Classification

This product is not regulated according to WHMIS 2015 classification criteria

National Inventories

Krasol® LBH 2000 (Trade Secret)

Listed on or exempt from listing on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on or exempt from listing on the Canadian DSL (Domestic Substances List)

China Inventory of Existing Chemical Substances (IECSC): Notified

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15.3. US State regulations

This product may contain California Proposition 65 substances at concentration levels below those required to be classified as hazardous by OSHA's Hazard Communication Standard (29 CFR 1910.1200). Contact TotalEnergies Petrochemicals & Refining USA, Inc. if you need specific information regarding status of this product with regard to California Proposition 65.

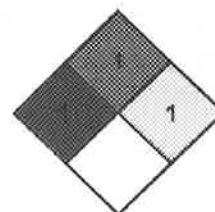
Section 16: Other information

Other information

Unless agreed to in a separate written agreement with the Customer, TotalEnergies Petrochemicals & Refining USA, Inc. makes no representations and disclaims all warranties, express or implied, with respect to biocompatibility and/or the suitability of this product for medical device applications including : (i) implantable devices intended for human or animal body, (ii) devices intended to be used in contact with internal body fluids, and (iii) devices intended to be used in contact with internal body tissues. If the Customer intends to use this product for any such application, it must first contact TotalEnergies Petrochemicals & Refining USA, Inc. and establish agreed terms and conditions for such use.

NFPA (National Fire Protection Association)

NFPA health hazard : 1
NFPA fire hazard : 1
NFPA reactivity : 1



Hazard System Rating

Health : 1
Flammability : 1
Physical Hazard : 1
Personal protection : See section 8 of SDS

US OSHA LABEL as specified under 29 CFR §1910.1200 (f). The label shown may include supplemental information in addition to required elements.

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TotalEnergies Petrochemicals & Refining USA, Inc., Cray Valley Division
PO Box 674411
Houston, TX 77267-4411 USA
Tel. 713-483-5000 or 1-877-871-2729

This material has no classified hazards under 29 CFR 1910.1200.

Precautionary statements not required. Consult the SDS for additional safety information.

US SDS Version: 1.9

Issue date: June 15, 2022

SDS ID: KRASOL_LBH_2000

SDS REFERENCE NUMBER: FP00372

SDS Template - TotalEnergies SDS US TEPRI Version 20.01

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