



Poly bd® R45 HTLO

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) : Poly bd® R45 HTLO
CAS-No. : 69102-90-5

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 : Poly bd® R45 HTLO
CAS-No. : 69102-90-5

Poly bd® R45 HTLO

Safety Data Sheet

Chemical name : 1,3-Butadiene, homopolymer, hydroxy-terminated

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. If irritation persists, consult a doctor. 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.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking, tears or redness persist. In case of burns: cool immediately with plenty of water and during emergency transport to a specialised hospital.

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. When mixed with air and exposed to ignition source, can burn in open air or explode if confined.

Explosion hazard : At high temperatures : Flammable or explosive vapor/air mixtures may be formed.

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. 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".

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.

Section 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Contact with hot material - prevent serious burns. Use only non-sparking tools. Eliminate all ignition sources if safe to do so. Steam drum heaters are recommended. 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.

Poly bd® R45 HTLO

Safety Data Sheet

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 : Electrical equipment should conform to the National Electric Code. Containers which are opened should be properly resealed and kept upright to prevent leakage.

Storage conditions : Keep container tightly closed. Store in a dry, cool area. Purge open drums with nitrogen before resealing. Viscosity may increase over time. Keep away from sources of ignition.

Incompatible materials : Strong oxidizing agents. Strong reducing agents. Strong acids. Peroxides.

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. Gloves must be replaced after each use and whenever signs of wear or perforation appear.

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
Appearance : Viscous.
Color : Colorless to light yellow.
Odor : No data available
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 : > 300 °C
Flash point : > 205 °C Cleveland open cup (COC)
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 : Water: practically insoluble
Partition coefficient n-octanol/water (Log Kow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : ~ 5000 mPa.s
Explosion limits : No data available

9.2. Other information

No additional information available

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.

775383 000364

5/8

000074

Poly bd® R45 HTLO

Safety Data Sheet

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 oxidizing agents. Strong reducing agents. Strong acids. Free radical initiators/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 : Ingestion. Skin and eye contact.

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Poly bd® R45 HTLO (69102-90-5)

LD50 oral rat : > 34600 mg/kg

Skin corrosion/irritation : Not classified
Practically non-irritating
(rabbit)

Serious eye damage/irritation : Not classified
Slight eye irritant (rabbit)

Respiratory or skin sensitization : Not classified
Does not cause cutaneous sensitization for guinea-pigs

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

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

Poly bd® R45 HTLO

Safety Data Sheet

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 regulated by the U.S. Department of Commerce, Export Administration Regulations, under Export Control Classification Number (ECCN) 1C111 and may not be exported, or re-exported, without a license from that agency. Diversion contrary to U.S. law is prohibited.
---------------------------	---

Export Control Classification Number (ECCN):	1C111
--	-------

15.2. International regulations

CANADA

Poly bd® R45 HTLO (69102-90-5)

WHMIS Classification	This product is not regulated according to WHMIS 2015 classification criteria
----------------------	---

National inventories

Poly bd® R45 HTLO (69102-90-5)

Listed on or exempt from listing on the AICS (Australian Inventory of Chemical Substances)
Listed on or exempt from listing on the Canadian DSL (Domestic Substances List)
Listed on or exempt from listing on the China Inventory of Existing Chemical Substances (IECSC)
Listed on or exempt from listing on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on or exempt from listing on the Korean ECL (Existing Chemicals List)
Listed on or exempt from listing on NZIoC (New Zealand Inventory of Chemicals)
Listed on or exempt from listing on the Philippines Inventory of Chemicals and Chemical Substances (PICCS)

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.

Poly bd® R45 HTLO

Safety Data Sheet

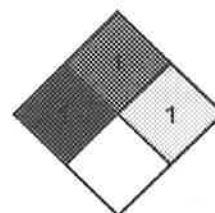
Section 16: Other information

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.

Poly bd® R45 HTLO

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: 1.10

Issue date: June 15, 2022

SDS ID: POLY_BD_R45HTLO

SDS REFERENCE NUMBER: 3010M

SDS Template - TotalEnergies SDS US TEPRI Version 20.01

The information contained in this Safety Data Sheet (SDS) is believed by TotalEnergies Petrochemicals & Refining USA, Inc. (TEPRI) to be accurate on the date issued. However, materials may present unknown hazards and should be used with caution. Final determination of suitability and use of any material is the sole responsibility of the user. Neither TEPRI nor any of its subsidiaries or affiliated companies assumes any liability whatsoever for the accuracy or completeness of the information contained herein or reliance thereto. If the material is repackaged, the user is responsible and must ensure that proper health, safety and other necessary information is included with the material and/or on the container. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING THE MATERIALS OR THE INFORMATION CONTAINED IN THIS SDS. ALTERATION OF THIS DOCUMENT IS STRICTLY PROHIBITED.