



Poly bd® R45 HTLO BHT

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 BHT
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

Resin Solutions, LLC
665 Stockton Drive, Suite 100
Exton, PA 19341

For non-emergency product information:
Phone: +1-484-284-8998
Email: product.stewardship@resinsolutions.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (Toll Free USA & Canada) / 703-527-3887 (Multiple languages)
Resin Solutions, LLC: +1-484-284-8989 (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

Other hazards which do not result in classification : Contact with hot material - prevent serious burns
The working steams can irritate the eyes as well as the respiratory tract
Repeated exposure may cause skin dryness or cracking.

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 BHT
CAS-No. : 69102-90-5
Chemical name : 1,3-Butadiene, homopolymer, hydroxy-terminated

Impurities and/or Stabilizing Additives which Contribute to the Classification:

Name	CAS-No.	% (Weight Percent)
2,6-di-tert-butyl-p-cresol (Stabilizer)	128-37-0	~ 2.7

3.2. Mixture

Not applicable

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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. Exposure to splashing of hot product: Treat the affected part with cold water (by spraying or immersion). Get immediate medical advice/attention.
- 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 : The working steams can irritate the eyes as well as the respiratory tract.
- Symptoms/effects after skin contact : Contact with hot material - prevent serious burns. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : Contact with hot material - prevent serious burns.

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.
- 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.

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- 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.

2,6-di-tert-butyl-p-cresol (128-37-0)		
USA ACGIH	ACGIH OEL TWA	2 mg/m ³ (IFV - Inhalable fraction and vapor)
USA ACGIH	Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Mexico	OEL TWA [1]	2 mg/m ³ (inhalable fraction and vapor)
Mexico	Remark (MX)	Irritación del tracto respiratorio superior; A4 (No clasificado como carcinógeno en humano Agente que puede ser cancerígeno para humanos pero que no puede ser concluyentemente asegurado por falta de datos. Estudios in vitro o animales no proveen indicaciones de carcinogenicidad suficientes para clasificar al agente en una de las otras categorías)

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 : Wear appropriate respiratory protection, if occupational exposure limits are exceeded or irritation/sensitivity is experienced. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

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 : 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

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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 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 BHT (69102-90-5)

LD50 oral rat	> 34600 mg/kg
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2,6-di-tert-butyl-p-cresol (128-37-0)

LD50 oral rat	> 5000 mg/kg
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LD50 dermal rat	> 2000 mg/kg (Source: JAPAN_GHS)
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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

2,6-di-tert-butyl-p-cresol (128-37-0)

IARC group	3 - Not classifiable
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National Toxicology Program (NTP) Status	Not listed
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Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

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Aspiration hazard : Not classified
Potential Adverse human health effects and symptoms : The working steams can irritate the eyes as well as the respiratory tract.

Section 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

2,6-di-tert-butyl-p-cresol (128-37-0)	
LC50 - Fish [1]	5 mg/l (Exposure time: 48 h - Species: Oryzias latipes)
EC50 - Other aquatic organisms [1]	6 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
EC50 - Other aquatic organisms [2]	> 0.42 mg/l (Exposure time: 72 h - Species: Desmodemus subspicatus)

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

2,6-di-tert-butyl-p-cresol (128-37-0)	
BCF - Fish [1]	230 – 2500
Partition coefficient n-octanol/water (Log Pow)	5.1

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 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

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15.2. International regulations

CANADA

Poly bd® R45 HTLO BHT (69102-90-5)

WHMIS Classification

This product is not regulated according to WHMIS 2015 classification criteria

National inventories

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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 Resin Solutions, LLC 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, Resin Solutions, LLC 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 Resin Solutions, LLC and establish agreed terms and conditions for such use.

NFPA (National Fire Protection Association)

NFPA health hazard

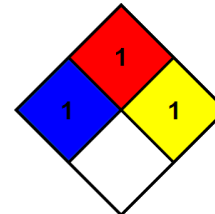
: 1

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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Resin Solutions, LLC
665 Stockton Drive, Suite 100
Exton, PA 19341 USA
Tel. +1-484-284-8989

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: 2.1

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SDS ID: PBD_R45HTLO_BHT

SDS REFERENCE NUMBER: 3011M

SDS Template - Resin Solutions LLC US Version 1.0

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Safety Data Sheet

The information contained in this Safety Data Sheet (SDS) is believed by Resin Solutions, LLC 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 Resin Solutions, LLC 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.