

Section 1: Identification

1.1. Product identifier

Product form : Substance
Product Identifier(s) : Poly bd® R45 M 1%
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)

Reproductive toxicity Category 2

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS US) : Warning
Hazard statements (GHS-US) : **Suspected of damaging fertility or the unborn child**
Precautionary statements (GHS-US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection, face protection.
If exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations

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.

Based on professional judgment, inconclusive testing, or sensitive individuals : May cause mild eye irritation.
May cause mild respiratory irritation.
May cause mild skin irritation.

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Section 3: Composition/Information on ingredients

3.1. Substance

Name : Poly bd® R45 M 1%
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)
2,2'-Methylenebis(4-methyl-6-tert-butylphenol) (Stabilizer)	119-47-1	1

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 : 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.
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 : Chronic (long-term) health effects may result from repeated overexposure.

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 : May form flammable/explosive vapor-air mixture.
Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). 1,3-butadiene. Hydrocarbons. Toxic fumes.

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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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. Steam drum heaters are recommended. 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. Contaminated work clothing must not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Electrical equipment should conform to the National Electric Code.
- Storage conditions : Keep container tightly closed. Store in a dry, cool area. Store locked up. Purge open drums with nitrogen before resealing. Viscosity may increase over time.
- 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.

None

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station. Safety shower. Eye fountain.
- Hand protection : Impermeable protective gloves.
- 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 : No data available
- 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: Slightly soluble
- 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.

10.5. Incompatible materials

Strong oxidizing agents. Strong reducing agents. Strong acids.

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

2,2'-Methylenebis(4-methyl-6-tert-butylphenol) (119-47-1)

LD50 oral rat	> 10000 mg/kg (Source: NLM_CIP)
LD50 dermal rabbit	> 10000 mg/kg (Source: ECHA_API)

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Suspected of damaging fertility or the unborn child.
The suspected reproductive toxicity of this product is derived from the antioxidant used in this product.

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Section 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

2,2'-Methylenebis(4-methyl-6-tert-butylphenol) (119-47-1)	
BCF - Fish [1]	400 – 840 (total lipid content)
Partition coefficient n-octanol/water (Log Pow)	6.25 (at 20 °C)

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 : Health hazard - Reproductive toxicity

Export Control Statement: Poly bd® R45 M is regulated by the U.S. Department of State under International Traffic in Arms (ITAR) Category V(e)7 and may not be exported without a license. Poly bd® R45 M may not be resold, diverted, transferred, or otherwise disposed of, to any other country or to any person other than the authorized end-user or consignee(s), either in its original form or after being incorporated into other end-items, without first obtaining approval from the U.S. Department of State or use of an applicable exemption.

15.2. International regulations

CANADA

No additional information available

National inventories

No additional information available

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.

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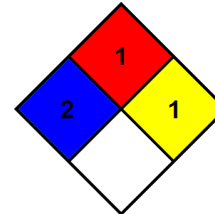
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Section 16: Other information

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 : 2
NFPA fire hazard : 1
NFPA reactivity : 1



Hazard System Rating

Health : 2*
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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Warning

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Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection, face protection.
If exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

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SDS REFERENCE NUMBER: 3014M

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