

**Section 1: Identification****1.1. Product identifier**

Product form : Substance  
Product Identifier(s) : Poly bd® R20 LM  
Poly bd® R20 LMA  
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**

Total 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@total.com

**1.4. Emergency telephone number**

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

**Section 2: Hazards identification****2.1. Classification of the substance or mixture****GHS-US classification**

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 statement not required

**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 to skin or eyes.  
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**

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

**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.

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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/injuries : 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 : May form flammable/explosive vapor-air mixture.  
Hazardous decomposition products in case of fire : Carbon oxides (CO, CO<sub>2</sub>). 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.

## 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. Avoid contact with elevated temperature or molten product to prevent burns. Use only non-sparking tools. 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. Eliminate all ignition sources if safe to do so.  
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.

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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 : Provide readily accessible eye wash stations and safety showers. Ensure good ventilation of the work station.

Hand protection : Protective 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.

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

Boiling point : > 300 °C

Flash point : > 205 °C Cleveland open cup (COC)

Auto-ignition temperature : No data available

Decomposition temperature : No data available

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

Log Kow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : 1500 mPa.s @ 30 °C

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.

#### 10.3. Possibility of hazardous reactions

Cracks into gaseous and liquid products above 426 °C. Decomposes by polymerization above 204 °C. Once initiated, the reaction generates enough heat to continue spontaneously.

#### 10.4. Conditions to avoid

Heat. Direct sunlight. High temperature. High temperature.

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### 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 : Not classified  
Based on available data, the classification criteria are not met

Poly bd® R20 LM (69102-90-5)	
LD50 oral rat	> 34600 mg/kg

Skin corrosion/irritation : Not classified  
Based on available data, the classification criteria are not met  
Practically non-irritating  
(rabbit)

Serious eye damage/irritation : Not classified  
Based on available data, the classification criteria are not met  
Slight eye irritant (rabbit)

Respiratory or skin sensitization : Not classified  
Based on available data, the classification criteria are not met  
Does not cause cutaneous sensitization for guinea-pigs

Germ cell mutagenicity : Not classified  
Based on available data, the classification criteria are not met

Carcinogenicity : Not classified  
Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified  
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : Not classified  
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure) : Not classified  
Based on available data, the classification criteria are not met

Aspiration hazard : Not classified  
Based on available data, the classification criteria are not met

## 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

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### 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.  
Waste 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) inventory.

##### 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 and technical data related to this product are export controlled by the United States (US) Government. Exportation/international shipments of this product are subject to licensing by the US Government. Export, reexport or other diversion, either in the original form or after being incorporated in an intermediate process into other end-items, is STRICTLY PROHIBITED unless expressly authorized by the cognizant agency of the US Government. If you plan to export this material in some form, please contact Total Petrochemicals & Refining USA, Inc. for more information.

Export Control Classification Number (ECCN): 1C111

#### 15.2. International regulations

##### CANADA

No additional information available

##### National inventories

##### 1,3-Butadiene, homopolymer, hydroxy-terminated (69102-90-5)

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

#### 15.3. US State regulations

California Proposition 65 - This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity, not limited to any that may be listed below

### Section 16: Other information

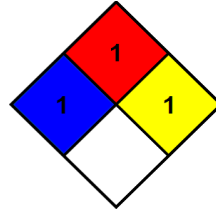
Training advice : Training staff on good practice. Manipulations are to be done only by qualified and authorized persons. Use good personal hygiene practices.

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### NFPA (National Fire Protection Association)

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



### HMIS III 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)

## Poly bd® R20 LM

Total 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 statement not required.

Version : 2.3

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SDS REFERENCE NUMBER: FP00385

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