



Ricobond® 1731

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) : Ricobond® 1731
Other means of identification : Polybutadiene, maleinized
CAS-No. : 179005-14-2

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 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
Chemical name : 1,3-Butadiene, homopolymer, maleated
CAS-No. : 179005-14-2

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. 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 : 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 : Slightly combustible. 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 : Not expected to be a fire/explosion hazard under normal conditions of use.
- Hazardous decomposition products in case of fire : Carbon oxides (CO, CO₂). Toxic fumes. 1,3-butadiene. Maleic anhydride. 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.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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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 place. Keep cool. This material should be stored under inert gas to prevent "skin" formation from occurring. If skin formation does occur, product quality is not compromised. Simply remove skin and use the remainder of the product.
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 Amber.
Odor	: Hydrocarbon. Mild.
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	: No data available
Flash point	: > 122 °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	: < 1
Solubility	: Water: practically insoluble
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: ~ 50000 mPa.s @ 45 °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.

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10.3. Possibility of hazardous reactions

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

10.4. Conditions to avoid

Direct sunlight. Heat. Avoid temperature above : 87°C.

10.5. Incompatible materials

No additional information available

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
Conclusive but not sufficient for classification

Ricobond® 1731 (179005-14-2)	
LD50 oral rat	> 2000 mg/kg

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitization : Not classified
Based on available data, the classification criteria are not met

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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13.1. Waste treatment methods

Section 14: Transport information

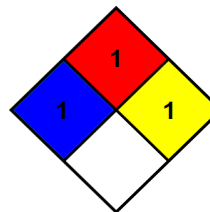
Not regulated by IATA

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NFPA (National Fire Protection Association)

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



Hazard 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)

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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.

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SDS REFERENCE NUMBER: 2102M

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