Ricobond® 1756

Safety Data Sheet

According to OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Section 1: Identification

1.1. Product identifier

Product form	:	Substance
Product Identifier(s)	:	Ricobond® 1756
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

TotalEnergies Petrochemicals & Refining USA, Inc.
Cray Valley Division
PO Box 674411
Houston,TX 77267-4411

For non-emergency product information:
Phone: 713-483-5000
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)

Skin sensitization, Category 1

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS-US) :

Signal word (GHS US)	:	Warning
Hazard statements (GHS-US)	:	**May cause an allergic skin reaction**
Precautionary statements (GHS-US)	:	Avoid breathing mist, spray, vapors. Contaminated work clothing must not be allowed out of the workplace. Wear Eye protection, impermeable protective gloves. If on skin: Wash with plenty of water. Specific treatment (see Section 4.1 of SDS or information on this label). If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. 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.

Section 3: Composition/Information on ingredients

3.1. Substance

Substance type : Polymer

Name : Ricobond® 1756

CAS-No. : 179005-14-2

Chemical name : 1,3-Butadiene, homopolymer, maleated

Where concentrations in this product are displayed as ranges, it is due to batch-to-batch variability.

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

Name	CAS-No.	% (Weight Percent)
Maleic anhydride (Impurity)	108-31-6	0.001 – 0.5

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.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. 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. Do not remove clothing adhering to the skin.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Obtain medical attention if pain, blinking, tears or redness persist. Heated Material: For serious burns from heated material, get medical attention. In case of contact with the eyes : Rinse immediately with plenty of water for 15 minutes.

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 after skin contact : May cause an allergic skin reaction. May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking. Contact with hot material - prevent serious burns.

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 : Slightly combustible. Heat from fire can generate flammable vapor.

Explosion hazard : Not expected to be an 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. Avoid contact with skin, eyes and clothing. 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.

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. Keep away from sources of ignition. 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.

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

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.

Maleic anhydride (108-31-6)		
USA ACGIH	ACGIH OEL TWA	0.01 mg/m³ (inhalable fraction and vapor)
USA ACGIH	Remark (ACGIH)	TLV® Basis: Resp sens. Notations: DSEN; RSEN; A4 (Not classifiable as a Human Carcinogen)
USA OSHA	OSHA PEL TWA	1 mg/m³
USA OSHA	OSHA PEL TWA	0.25 ppm
IDLH	IDLH	10 mg/m³

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 : Impermeable 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 : brown.

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

Initial boiling point and boiling range : No data available

Flash point	:	> 122 °C Cleveland open cup (COC)
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	< 1
Solubility	:	Water: practically insoluble
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	~ 140000 mPa·s (55 ºC)
Explosion limits	:	No data available

9.2. Other information

Explosive properties : Not expected to be an explosion hazard under normal conditions of use.

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. 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

1,3-Butadiene, homopolymer, maleated (179005-14-2)	
LD50 oral rat	> 2000 mg/kg

Maleic anhydride (108-31-6)	
LD50 oral rat	1090 mg/kg body weight
LD50 dermal rabbit	2620 mg/kg (Source: NLM_CIP)
LC50 inhalation rat	0.16 mg/l/4h

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Respiratory sensitization: Not classified. May cause an allergic skin reaction.

This product may contain maleic anhydride (MA) at > 0.1% (1000 ppm). A sample of this or a similar product containing > 0.1% MA was tested in vitro by DPRA and h-CLAT methods, and the weight of evidence resulted in a positive classification for skin sensitization.

This product is not classified for respiratory sensitization because relevant exposure is not

expected due to its physical state.

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

Maleic anhydride (108-31-6)	
LC50 - Fish [1]	75 mg/l/96h (Lepomis macrochirus)
EC50 - Crustacea [1]	42.81 mg/l 48h - Daphnia magna (OECD 202 method) (Read-across (Analogy))
ErC50 algae	74.35 mg/l (72 Hours) (Pseudokirchneriella subcapitata) (OECD 201 method) (Read-across (Analogy))

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Maleic anhydride (108-31-6)	
Partition coefficient n-octanol/water (Log Pow)	-2.36 (at 19.8 °C (at pH 4)

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 - Respiratory or skin sensitization

Export Control Classification Number (ECCN): EAR99 (No License Required)

15.2. International regulations

CANADA

No additional information available

National inventories

DSL (Canadian Domestic Sustances List)	All components are listed or exempted
IECSC (China Inventory of Existing Chemical Substances)	All components are listed or exempted
ENCS (Japanese Existing & New Chemical Substances inventory)	All components are listed or exempted

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.

Section 16: Other information

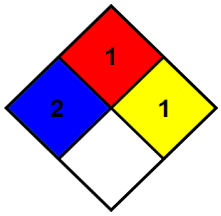
Other information : Unless agreed to in a separate written agreement with the Customer, TotalEnergies Petrochemicals & Refining USA, Inc. makes no representations and disclaims all warranties, express or implied, with respect to biocompatibility and/or the suitability of this product for medical device 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 : 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.

Ricobond® 1756

TotalEnergies Petrochemicals & Refining USA, Inc., Cray Valley Division
PO Box 674411
Houston, TX 77267-4411 USA
Tel. 713-483-5000

Warning

May cause an allergic skin reaction

Avoid breathing mist, spray, vapors.
Contaminated work clothing must not be allowed out of the workplace.
Wear Eye protection, impermeable protective gloves.
If on skin: Wash with plenty of water.
Specific treatment (see Section 4.1 of SDS or information on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of contents and container in accordance with all local, regional, national and international regulations.

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