



# Polybutene

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Revision Date: 09/16/2020 March 26, 2012 / Rules and Regulation Supersedes: 10/07/2019

### PRODUCT & COMPANY IDENTIFICATION

Product Name: Polybutene

Isobutylene/butene copolymer Synonyms:

**INCI Name:** Polybutene CAS Number: 9003-29-6

Formula: No data available

Product Form: Liquid

Product Use: Cosmetic use Distributor: MakingCosmetics Inc. Address: 10800 231st Way NE Redmond, WA 98053 (USA)

425-292-9502 / 425-292-9601 Phone / Fax: Web: www.makingcosmetics.com

Emergency Telephone Number: 1-800-424-9300

(Chemtrec)

### **HAZARDS IDENTIFICATION**

OSHA/HCS Status: While this material is not considered hazardous by the OSHA Hazard Communication

> Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for

employees and other users of this product.

**GHS Classification:** Not classified

**GHS Labeling:** Not a dangerous substance according to GHS

**GHS Hazard Pictograms:** None **GHS Hazard Statements:** None

**GHS Precautionary Statements:** P103: Read label before use.

P102: Keep out of reach of children.

P101: If medical advice is needed, have product container or label at hand.

Potential Health Hazards: Eyes: May cause slight transient irritation. Heated material can cause thermal burns.

Inhalation: Exposure to aerosols or particulates from heated material may cause adverse

lung effects if high concentrations are inhaled.

Skin: Prolonged or repeated contact can defat the skin and lead to irritation, cracking,

and/or dermatitis. Heated material can cause thermal burns. Ingestion: May cause gastrointestinal irritation and diarrhea.

NFPA Ratings (704): Health

0 Minimal Flammability 1 Slight Reactivity 0 Minimal

Specific Hazard N/A

### 3 COMPOSITION/INFORMATION ON INGREDIENTS

Component CAS No. Weight % Molecular Weight Polybutene 9003-29-6 100% Not Available

### FIRST AID MEASURES

Hot material: Flush eyes with plenty of water for at least 15 minutes. Seek medical assistance for Eyes:

mechanical removal of this material form the eye. The use of flush fluid, other than water, is not

recommended.

Cold material: Flush eyes with plenty of water.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult,

give oxygen. Get medical advice/attention.

Hot material: Immediately flush with cool water for at least 15 minutes. Get immediate medical Skin:

attention.

Cold material: Clean exposed skin with waterless hand cleaner.





Ingestion:

Do Not Induce Vomiting unless directed to do so by medical personnel. Never give anything by mouth

to an unconscious person. Wash out mouth with water. Call physician immediately.

Notes to Physician: Medical personnel may leave the material in place to minimize physical damage to the skin.

Protection of First-Aiders:

Flash Points:

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation.

### FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Special protective equipment & precautions for firefighters:

May be combustible at high temperature. Use appropriate media (foam, carbon dioxide, dry chemical) for adjacent fire. Do not use water.

Where open cell insulation has been contaminated with polybutene, spontaneous combustion may occur at temperatures as low as 138°C (280°F). Therefore, where open cell insulation has been used, the temperature of storage tanks and heat tracing must be kept well below 120°C (250°F) and any insulation contaminated with polybutene should be replaced immediately. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

No data available

Specific hazards arising from the chemical:

Rapid depolymerization can occur in a fire and produce flammable vapors. May depolymerize at temperatures above 200°C with the production of extremely flammable butene monomers. Vapor may cause fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Decomposition products may include carbon monoxide and carbon dioxide. See also Stability and Reactivity section.

### **ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment & emergency procedures: For non-emergency personnel: Immediately contact emergency personnel. Eliminate all ignition sources if safe to do so. Keep unnecessary personnel away. Do not touch or walk through spilled material. Follow all firefighting procedures (Section 5). Use suitable protective equipment (Section 8). For emergency responders: Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.

**Environmental precautions:** 

Avoid liquid release into sewers/public water. Notify environmental authorities in case of large leaks.

For small spills: add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal.

Methods and material for containment and cleaning up: For large spills: dyke spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material and runoff with soil and surface waterways. Treat as an oil spill. See Section 13 for waste disposal information.

### **HANDLING & STORAGE**

Precautions for safe handling:

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty contains retain product residue and can be hazardous. Do not reuse container. Eating, drinking, and smoking should be prohibited in area where this material is handled. stored, and processed. Workers should wash hands and face before eating, drinking, and





Conditions for safe storage, incl. any incompatibilities:

smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Store in a segregated and approved area. A potentially flammable atmosphere may be generated if material is held hot for prolonged periods. For prolonged storage at temperatures of 60°C and above, keep in rust-free tanks and exclude oxygen by use of a nitrogen blanket. Heating systems which generate localized hot spots should never be used. Suitable storage materials are: mild steel/carbon steel. Store and use away from heat, sparks, open flame, or any other ignition source. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Keep away from heat and incompatible materials (see section 10 for incompatibilities).

### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits** Component **Basis Entity** Polybutene Not available

TWA: Time Weighted Average over 8 hours of work. TLV: Threshold Limit Value over 8 hours of work.

**REL: Recommended Exposure Limit** PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes. IDLH: Immediately Dangerous to Life or Health WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection:

Safety glasses with side shields should be worn. Goggles, face shield, or other full-face protection Eyes:

should be worn if there is a risk of direct exposure to aerosols or splashes or when material is handled

No special ventilation requirements. Good ventilation should be sufficient to control worker exposure Inhalation:

to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure below any recommended or statutory limits. If ventilation is inadequate, use respirator that will protect against

organic vapor and dust/mist.

Wear gloves that cannot be penetrated by chemicals or oil. Nitrile rubber. When handling hot material,

wear heat-resistant protective gloves, clothing, and face shield that are able to withstand the Body:

temperature of the heated product. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant gloves will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling processes vary, safety procedures should be developed for

each intended application. Gloves should therefore be chosen in consultation with the

supplier/manufacturer and with a full assessment of the working conditions.

Wear apron or coverall if there is a risk of exposure to splashes. When handling hot material, wear heat-resistant protective gloves, clothing, and face shield that are able to withstand the temperature

of the molten product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this

Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing Other:

facilities accessible to areas of use and handling.

## 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid Odor: Characteristic Odor Threshold: Color:

Molecular Weight:

pH:

No data available Clear, colorless No data available No data available

Vapor Pressure (at room temp): Vapor Density: **Evaporation Rate:** Flammability: **Upper/lower Explosive Limit:** 

Flash Point:

<0.1 kPa (<0.75 mm Hg) No data available No data available Not applicable No data available

Closed Cup: >125°C to >190°C (>257°F to >374°F) [Pensky-Martens]

Open Cup: >150°C to >250°C (>302°F to >482°F) [Cleveland]





**Boiling Point:** Specific Gravity @ 25°C: 1.05-1.20 Polymer that decomposes

before reaching a boiling

point

No data available Solubility: None

Relative Density: 0.869-0.906 Auto-Ignition Temperature: No data available

> **Decomposition Temperature:** May depolymerize at temperatures above 200°C with the production of

> > extremely flammable butene

monomers

Viscosity (kinematic)

Partition Coefficient: n-

>500 mm<sup>2</sup>/s (>500 cSt)

No data available

No data available **Explosive Properties:** 

(40°C (104°F)):

Melting Point:

octanol/water:

Oxidizing Properties: No data available Freezing Point: No data available

### 10 STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under recommended storage and handling conditions.

Hazardous Polymerization: May depolymerize at temperatures above 200°C with the production of

extremely flammable butene monomers.

Keep away from all sources of ignition, heat, sparks, flame. Avoid strong Conditions to Avoid:

oxidizing conditions. Avoid extended exposure to temperatures above 60°C in

the presence of air.

Incompatible Materials: Strong oxidizing agents; acidic clays at >100°C

**Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

### TOXICOLOGICAL INFORMATION

**Acute Toxicity:** No data available Skin: LD50: >10250 mg/kg

Prolonged or repeated contact can defat the skin and lead to irritation, cracking

and/or dermatitis. Heated material can cause thermal burns.

Eyes: May cause slight transient irritation. Heated material can cause thermal burns. Respiratory:

Exposure to aerosols or particulates from heated material may cause adverse lung

effects if high concentrations are inhaled.

Ingestion: LD50: >34600 mg/kg

Ingestion may cause gastrointestinal irritation and diarrhea.

No component of this product at levels greater than or equal to 0.1% is identified as Carcinogenicity:

a carcinogen by ACGIH, IARC, or the European Commission (EC).

Teratogenicity: No component of this product at levels greater than or equal to 0.1% is classified by

established regulatory criteria as teratogenic or embryotoxic.

Germ Cell Mutagenicity: No component of this product at levels greater than or equal to 0.1% is classified by

established regulatory criteria as a mutagen.

No data available **Embryotoxicity:** Specific Target Organ Toxicity: No data available

Reproductive Toxicity: No component of this product at levels greater than or equal to 0.1% is classified by

regulatory criteria as a reproductive toxin.

Respiratory/Skin Sensitization: No data available Corrosivity: No data available Sensitization: No data available

No data available Irritation: Repeated Dose Toxicity: No data available

### 12 ECOLOGICAL INFORMATION

**Ecotoxicity** 

Aquatic Vertebrate: LC50: >1000 mg/L (Fish) (96h)





Aquatic Invertebrate: EC50: >1000 mg/L (Daphnia) (48h)

Terrestrial: No data available Persistence and Degradability: No data available **Bioaccumulative Potential:** No data available

Mobility in Soil: This product is not likely to move rapidly with surface or groundwater flows because

of its low water solubility. This product is not likely to volatilize rapidly into the air

because of its low vapor pressure.

PBT and vPvB Assessment: No data available Other Adverse Effects: No data available

### **DISPOSAL CONSIDERATIONS**

Users should review their operations in terms of the applicable federal/national or local

Waste Residues: regulations and consult with appropriate regulatory agencies if necessary before disposing of

waste product container.

Users should review their operations in terms of the applicable federal/national or local

**Product Containers:** regulations and consult with appropriate regulatory agencies if necessary before disposing of

waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

### TRANSPORT INFORMATION

UN Number: UN3257

Proper shipping name: Elevated temperature liquid, n.o.s.

(Polybutene) Hazard class: 9 Packing group: III

DOT (Dept. of Transportation, USA): Environmental hazards: No

Additional information: Limited quantity: no

Packaging instructions: Exceptions: none. Non-bulk: none.

Bulk: 247.

Quantity limitation: Passenger aircraft/rail: forbidden.

Cargo aircraft: forbidden.

Special provisions: IB1, T3, TP3, TP29

This material is not regulated for transport when shipped in non-bulk packages. When this material is shipped at temperatures <100C this material is not regulated for

transport.

TDG (Transportation of Dangerous Goods, Canada): No data available

UN Number: UN3257

Proper shipping name: Elevated temperature liquid, n.o.s. IMDG (International Maritime Dangerous Goods):

(Polybutene) Hazard class: 9 Packing group: III

Environmental hazards: No Additional information:

> Emergency schedules: F-A, S-P Special provisions: 232, 274

Remarks: when this material is shipped at temperatures

<100 this material is not regulated for transport

This material is not regulated for transport when shipped in non-bulk packages. When this material is shipped at temperatures <100C this material is not regulated for

transport.

IATA (International Air Transport Association): Forbidden





This material is not regulated for transport when shipped in

non-bulk packages. When this material is shipped at temperatures <100C this material is not regulated for

transport.

ICAO (International Civil Aviation Organization): No data available

Exempted

Not listed

Not listed

Not listed

Not listed

Not listed

Not listed

Annex II of MARPOL and the IBC Code:

Proper shipping name: Polybutene

Ship type: 2

Pollution category: Y

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of any accident or spillage.

### **REGULATORY INFORMATION**

TSCA Inventory Status: Listed

No data available DSCL (EEC):

WHMIS (Canada): Listed **EU EINECS/ELINCS/NLP:** Exempted Listed China IECSC: China IECIC (06.30.2014): Listed Australia AICS: Listed Japan: Listed New Zealand: Listed Philippines: Listed Republic of Korea: Listed Taiwan: Listed

**UNECE Aarhus Protocol on POPs** 

and Heavy Metals:

Turkev:

Rotterdam Convention on Prior

Informed Consent (PIC):

Stockholm Convention on Not listed

Persistent Organic Pollutants:

Montreal Protocol:

Chemical Weapon Convention

List Schedules I, II, & III

Chemicals:

California Prop. 65: This product does not require a Safe Harbor warning under California Prop. 65.

US Clean Air Act Section 112(b) Not listed

Hazardous Air Pollutants (HAPs):

US Clean Air Act Section 602

Class I Substances:

US Clean Air Act Section 602 Not listed

Class II Substances: **US DEA List I Chemicals** 

Not listed (Precursor Chemicals):

**US DEA List II Chemicals** 

(Essential Chemicals):

**SARA 304 RO:** Not applicable SARA 311/312: Not applicable **SARA 313:** Not applicable Massachusetts RTK: Not listed New York RTK: Not listed New Jersey RTK: Not listed

### 16 OTHER INFORMATION

09/16/2020 Revision Date:





Compliance:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Disclaimer:

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.