SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32, PB32(Kosher), PB120C, PB122, PB124, PB128

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Revision Date: 10/12/2018  Date of issue: 10/12/2018  Version: 1.7

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Substance

Product Name: SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher) PB32, PB32(Kosher), PB120C, PB122, PB124, PB128

Intended Use of the Product  No use is specified.

Name, Address, and Telephone of the Responsible Party

Company
Soltex, Inc. (Synthetic Oils & Lubricants of Texas)
3707 FM 1960 W Ste. 560
Houston, TX 77068
(281)-587-0900
soltexinc.com

Emergency Telephone Number

Emergency Number  : (800)-424-9300 (CHEMTREC); (281)-587-0900 (Other Safety Information)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture GHS-US/CA

Classification  : Not classified.

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)A  : No labeling applicable.
Signal Word (GHS-US/CA)  : No signal word.
Hazard Statements (GHS-US/CA)  : No known significant effects or critical hazards

Other Hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Name  : SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32, PB32(Kosher), PB120C, PB122, PB124, PB128

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>% *</th>
<th>GHS Ingredient Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polybutene (Butene/isobutylene Copolymer)</td>
<td>(CAS No) 9003-29-6</td>
<td>&gt;99</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

Inhalation: Move the affected person to fresh air. If breathing is difficult, apply artificial respiration or administer oxygen. Call for medical attention.

Ingestion/Aspiration: If conscious, give the affected person some water. Call for medical attention.

Contact skin/eyes: Remove contaminated clothing. Wash the affected area thoroughly with soap and water. In case of burns by contact with heated product, cool quickly with plenty of water. Do not remove the solidified product without medical assistance. Call for medical attention. Flush with copious amounts of water for up to 15 minutes. Call for medical attention.

General: Call for medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing agents: CO2, foams, water spray and dry chemicals.

WATER SHOULD NEVER BE USED DIRECTLY.
SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32, PB32(Kosher), PB120C, PB122, PB124, PB128

Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Non suitable extinguishing agents: Not available
Combustion products: CO₂, H₂O and CO (in case of incomplete combustion).

Special measures: Move container from fire area if it can be done without risk. Apply cooling water to the containers sides exposed to flames until well after fire is out. Stay away from tank. In case of massive fire in cargo area, use unmanned hose holder or monitor nozzles; if fire goes out of control, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank wall due to fire. Consult and follow existing emergency standard procedures.

Special hazards: Combustible liquid.
Protective equipment: Fire-fighters’ protective clothing. At high concentration of vapours and/or fumes, self-contained breathing apparatus will be needed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Environmental precautions: Spillages form a film over water surface, which avoid oxygen transfer.

Personal precautions: Avoid skin and eye contact with the product and inhalation of vapours from heated product.

Cleanup methods
Small spillages: Take up with non-combustible absorbent materials. Transfer to sealed containers for later disposal.
Large spillages: Avoid product dispersion with mechanical barriers. Dike far ahead of liquid spill and aspirate liquid into closed containers for later disposal.

Personal protection: Suitable protective clothing, safety goggles and gloves.

SECTION 7: HANDLING AND STORAGE

Handling:
General precautions: Wear suitable protective clothing, gloves and safety goggles to prevent skin and eyes contact with the product and use respiratory protection to prevent inhalation of vapours from heated product. In the areas where the product is stored, handled or used, keep all ignition sources away and do not smoke, eat or drink. Product transfer must be done in earthed, airtight conducts. Electrically ground all equipment when handling this product and use only non-sparking tools.

Specific conditions: Good local exhaust ventilation.

Specific Use: Industrial use.

Storage:
Temperature and decomposition products: The product begins to decompose at about 350 °C, releasing CO₂, H₂O and CO (in case of incomplete combustion).

Dangerous reactions: Mixtures of silver peroxide with 1% of polyisobutylene are explosive.

Storage conditions: Keep the product in properly sealed and labelled containers in cool and well-ventilated place. Keep them away from ignition sources and incompatible materials.

Incompatible materials: Oxidizers. Silver peroxide.

SECTION 8: EXPOSURE CONTROLS/PERSOVAL PROTECTION

Personal protection:
Respiratory protection: Respiratory protection to prevent inhalation of vapours from heated product.

Eye protection: Safety goggles or face-shield to prevent eyes contact with the product.

Skin protection: Gloves, suitable protective clothing and appropriate footwear are recommended.

Other protective equipment: Showers and eye-washers in working area.
SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32
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Safety Data Sheet
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General precautions: Good local exhaust ventilation. Avoid direct contact with the product and vapour inhalation.

Specific hygiene measures: Contaminated clothing should be changed immediately. Good work practices and the adoption of good personal hygiene measures reduce unnecessary exposures. Care should be taken to ensure proper skin cleaning by washing thoroughly with soap and water, followed by the application of a skin re-conditioning cream. Use skin reconditioning cream after work.

Exposure controls: Not available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear colorless, or pale yellow, tacky semi-solid/liquid resin or rubberlike</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild, Hydrocarbon</td>
</tr>
<tr>
<td>Color, D1500</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;110°C (&gt;230°F)</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Decomposes</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 0.001 kPa (0.01 mm Hg)</td>
</tr>
<tr>
<td>Relative Vapor Density at 20°C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.83-0.92</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition Coefficient: N-Octanol/Water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>4.5-4900 cSt @ 100°C (212 °F)</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable at room temperature.

Materials to avoid: Oxidizers. Silver peroxide.

Conditions to avoid: High temperatures.

Hazardous decomposition/combustion products: The product begins to decompose at about 250°C, releasing CO₂, H₂O and CO (in case of incomplete combustion).

Polymerizations risk: Not available

Conditions to avoid: Not available
SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32
PB32(Kosher), PB120C, PB122, PB124, PB128

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SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Routes of exposure: Inhalation. Skin and eyes contact. Ingestion is easy to avoid

Acute and chronic effects:

Vapours from heated product may cause respiratory system, skin and eyes irritation. Slightly irritant in contact with skin or eyes. Contact with heated product may cause burns.

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polybutene (Isobutylene/butene copolymer)</td>
<td>LC50 Inhalation (EPA)</td>
<td>Rat</td>
<td>&gt;19171 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal (OECD)</td>
<td>Rat</td>
<td>&gt;2000 mg/kg bw</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral (OECD401)</td>
<td>Rat</td>
<td>&gt;2000 mg/kg bw</td>
<td>-</td>
</tr>
</tbody>
</table>

Carcinogenicity: Not available.

Reproductive toxicity: No data available.

Medical conditions which increase hazard to exposure: Respiratory deficiencies and dermatological problems.

SECTION 12: ECOLOGICAL INFORMATION

Pollutant potential:

Persistence and degradability: The product has long hydrocarbon insoluble chains that make biodegradation process difficult. It is not readily removed from water or soil and it has high persistence in the environment.

Mobility/bioaccumulative potential: No data available on polyisobutylene bioaccumulative problems.

Ecotoxicological effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods (surplus): Recycling when possible.

Waste: Liquids from industrial processes.

Disposal: Consult with authorized environmental regulatory agencies for guidance on acceptable disposal practices.

Handling: Contaminated materials should be regarded as toxic and dangerous waste and have the same risk and need the same precautions as the product. Do not run off the product to sewers.

Provisions: Companies that recover, dispose, store, transport or handle waste should comply with local and/or national provisions in force on waste management.

SECTION 14: TRANSPORT INFORMATION

Special precautions: Stable at room temperature and during transport. Transport in properly sealed and labelled containers.

Additional Information:
If the product is transported in temperatures lower than 100° C, it is not classified as a hazardous material. If the product is transported in temperature ABOVE 100°C, this SDS does not apply.

LAND TRANSPORT:

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not classified as a Dangerous Goods for Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Hazard class</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Hazard identification number</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
</tbody>
</table>
SOLTEX POLYBUTENES; PB6, PB8, PB10, PB12, PB16, PB18, PB20, PB24, PB24(Kosher), PB32
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<table>
<thead>
<tr>
<th>Packing group</th>
<th>Not classified as a Dangerous Goods for Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt amount</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
</tbody>
</table>

**AIR TRANSPORT (ICAO/IATA):**

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not classified as a Dangerous Goods for Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Hazard class</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>CRE</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Passenger and cargo aircraft</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Cargo aircraft only</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
</tbody>
</table>

**MARITIME TRANSPORT (IMDG/IMO):**

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Not classified as a Dangerous Goods for Transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Number</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Hazard class</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Packing group</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Stowage and segregation</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
<tr>
<td>Ems</td>
<td>Not classified as a Dangerous Goods for Transportation</td>
</tr>
</tbody>
</table>

**SECTION 15: REGULATORY INFORMATION**

**US Federal Regulations**

**SOLTEX POLYBUTENES; PB24 and PB24(Kosher)**

<table>
<thead>
<tr>
<th>SARA Section 311/312 Hazard Classes</th>
<th>Immediate (acute) health hazard</th>
</tr>
</thead>
</table>

**Butene, homopolymer (9003-29-6)**

Listed on the United States TSCA (Toxic Substances Control Act) inventory

**US State Regulations**

Neither this product nor its chemical components appear on any US state lists.

**Canadian Regulations**

**Butene, homopolymer (9003-29-6)**

Listed on the Canadian DSL (Domestic Substances List)

**International Regulations**

**Butene, homopolymer (9003-29-6)**

Listed on the EU NLP (No Longer Polymers) inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
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 TCSI (Taiwan Chemical Substance Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on INSQ (Mexican national Inventory of Chemical Substances)
Listed on TCSI (Turkey Chemical Substance Inventory)

10/12/2018 EN (English US) 5/6
SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>10/12/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Information</td>
<td>This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015