VORONEZHSYNTHEZKAUCHUK JSC

SAFETY DATA SHEET


STYRENE-BUTADIENE THERMOPLASTIC RUBBER (SBS)
Block-Copolymer
GRADES SBS L 30-01; SBS R 30-00

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product identifier
Name of Substance: Styrene-butadiene thermoplastic rubber (SBS)
Name of IUPAC: benzene, ethenyl-, polymer with buta-1,3-diene
Synonyms: Synthetic thermoplastic rubber; Poly(styrene-co-butadiene)
Product Grades: SBS L 30-01; SBS R 30-00
Registration # for 1,3-butadiene:
(CAS #106-99-0; EC #203-450-8) 01-2119471988-16-0034
Index No(CLП): 601-013-00-X
Registration # for styrene:
(CAS #100-42-5; EC #202-851-5) 01-2119457861-32-0016
Index No(CLП): 601-026-00-0
Registration # for silicon dioxide:
(CAS # 7631-86-9/ 112926-00-8; EC# 231-545-4) 01-2119379499-16-XXXX

1.2 Relevant identified uses of the substance
1.2.1 Identified use(s) for grade SBS L 30-01: for manufacture of rubber technical goods (adhesives, fillet sealant, shoe compositions, mastics, adhesive matters, for modifying of plastics and bitumen, for road and roofing materials manufacturing and protective coatings).
Identified use(s) for grade SBS R 30-00: for manufacture of shoe compositions, into polymeric -bituminous mixtures, especially of roofing type, for the manufacture of road coatings, mastics, adhesives, waterproofing materials.

DISCLAIMER
This product is a polymer and is not classified as dangerous under criteria of Directives No 67/458/EEC, No 1999/45/EC and Regulation (EC) No 1272/2008 (Regulation CLP). This polymer does not contain substances classified as dangerous under Article 59.2 Regulation (EC) No 1272/2008, namely:
- in an individual concentration of ≥ 1 % by weight for non-gaseous mixtures posing human health or environmental; or
- in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures that is carcinogenic category 2 or toxic to reproduction category 1A, 1B and 2, skin sensitiser category 1, respiratory sensitiser category 1, or has effects on or via lactation or is persistent, bioaccumulative and toxic (PBT) in accordance with the criteria set out in Annex XIII or very persistent and very bioaccumulative (vPvB) in accordance with the criteria set out in Annex XIII; or
- a substance for which there are Community workplace exposure limits.
In accordance with mentioned above, this product does not require and official e-SDS as per Regulations (EC) No 1907/2006 (articles 31.1; 31.2) and Commission Regulation (EU) No 453/2010.
This e-SDS is developed in good faith to provide a customer with sufficient information allowing to take necessary measures to comply with relevant HSE requirements.
1.2.2 Uses advised against: Uses other than those given in section 1.2.1 are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

1.3 Details of the supplier of the safety data sheet

**Only representative**

Company name: Gazprom Marketing and Trading France  
Address: 68 avenue des Champs-Elysées, 75008, Paris, France  
Contact Telephone: +33 1 42 99 73 50  
Fax: +33 1 42 99 73 99  
Email Address: Yury.severinchik@gazprom-mt.com

**Supplier**

Company name: Voronezhsynthezkauchuk JSC  
Address: 2, Leninsky prospect, Voronezh, Russia, 394014  
Phone: +7 473 220 68 88  
Fax: +7 473 220 68 69  
Email Address: VSK-office@vsk.sibur.ru  
Emergency phone: +7 473 249 09 00, +7 473 220 76 30 (round the clock)

Emergency phone in the country of delivery: 112 (Please note that emergency numbers may vary depending upon the country of delivery though 112 remains valid as universal number).

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**SECTION 2. HAZARDS IDENTIFICATION**

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS)  
Not classified as a hazardous substance.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP/GHS)  
Not applicable.

2.3 Specific hazard

No significant health hazard in normal industrial use conditions.  
Contact of melted/ heated product may cause thermal burns.  
Processing vapours, which can irritate eyes and respiratory tract, may form when product is heated at high temperatures.  
Combustible solid.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

This product is a synthetic styrene-butadiene thermoplastic rubber consisting of at least 98.25% co-polymer from styrene and butadiene (28.5 - 31.5% bound styrene), binary mixture of antioxidants (mix 0.16 - 0.2% CAS#2082-79-3/EC#218-216-0 and 0.3 - 0.34% CAS#96152-48-6/EC#306-120-2), adhesion reducing powder: about 0.3% calcium distearate (CAS#1592-23-0/EC# 16-472-8) or 0.2 – 0.5% silicon dioxide (CAS#7631-86-9/EC#231-545-4). The product may contain traces of styrene (monomer): < 0.02%.

Formula:

\[
\left\{ \left[ \text{C}_4\text{H}_8 \right] \left[ \text{CH}_2-\text{CH}_2 \right]_n \left[ \text{C}_4\text{H}_8 \right] \right\}_4 \text{Si} \\
\text{C}_4\text{H}_8
\]

where \( n = 0.3 \) - is the number of polystyrene block fragments;  
\( m = 0.7 \) - is the number of polybutadiene block fragments;
<table>
<thead>
<tr>
<th>Name</th>
<th>EC #</th>
<th>CAS #</th>
<th>Content, %</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(styrene-co-butadiene)</td>
<td>none</td>
<td>9003-55-8</td>
<td>≥ 98.25</td>
<td>none</td>
</tr>
</tbody>
</table>

The product does not contain impurities or additives that could affect product’s labelling and classification according to Regulation (EC) No 1272/2008 (CLP) in the concentration ranges specified.

**SECTION 4. FIRST-AID MEASURES**

**4.1 Description of first aid measures**

**General information**

Styrene-butadiene thermoplastic rubber at normal conditions is stable non-volatile, causes non-exhaustive effects. No significant health hazard in normal industrial use conditions. Spontaneous penetration of styrene-butadiene thermoplastic rubber into human organism is impossible. Contact with eyes may cause mechanical damage. Contact with skin has no effects. Inhalation poisoning is unlikely. Contact with melted/heated product may cause thermal burns. Thermal decomposition products inhalation may irritate respiratory system, eye irritation

**Inhalation**

In emergency and in case of poisoning by rubber combustion products or if decomposition or thermal destruction products are inhaled: Move any exposed person to fresh air at once. Keep warm and at rest. If there is respiratory distress give oxygen. If respiration stops or shows signs of failing, apply artificial respiration. Get medical attention.

**Ingestion**

In case of accidental swallowing: Rubber particles in case of accidental penetration of the airways may cause mechanical irritation of respiratory tract, cough. In this case the following actions are to be taken. Wash out mouth with water and give plenty of water to drink, provided person is conscious. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have the exposed person lean forward. Get medical aid.

**Skin contact**

After contact with hot product immediately wash skin with large volume of cold water. Get medical attention.

**Eye contact**

Rinse immediately eye with plenty of low pressure water for at least 15 minutes. Remove any contact lenses. Get medical attention.

**4.2 Most important symptoms and effects, both acute and delayed**

Inhalation Symptoms: thermal-oxidative products inhalation may irritate respiratory system, eye irritation.

Skin Contact Symptoms: contact with hot product may cause serious burns.

Eye Contact Symptoms: eye Contact may cause mechanical damage, irritation of eyes mucous. Contact with hot product may cause serious burns.

Ingestion/aspiration Symptoms: ingestion/aspiration may cause irritation of digestive tract. May cause gastrointestinal blockage.
4.3 Notes for the doctor
No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media: Use chemical and air-filled foam, dry chemical, water spray. For small flame formation: carbon dioxide extinguisher or powder fire extinguisher, fire blanket. Unsuitable extinguishing media: Do not use water jets.

5.2 Fire fighting procedures
Keep away from sources of ignition, no smoking. Extinguish fire keeping safe distance. Not yet ignited rubber briquettes to be kept cool by means of water spraying.

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

5.4 Special Protective Equipment for fire-fighters
Wear canvas protective suit, gloves, helmets, face shields, rubber or kersey boots, gas mask. In proximity to fire wear full protective clothing and MSHA/NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Take precautionary measures against static discharges. Ensure adequate ventilation. For additional information, refer to Section 8, Exposure Controls and Personal Protection equipment.

6.2 Individual safety measures
Remove sources of ignition, provide workplace ventilation, air monitoring of the workplace, avoid contact with eyes.

6.3 Environmental precautions
Do not allow penetration of the product into water reservoirs, surface and ground water, sewer ducts and soil. Preventing disposal into water reservoirs of contaminated water without treatment. Monitor content of hazardous substances in the air. Provide sealing of process equipment.

6.4 Spill clean-up methods
When the product gets into water or ground collect the product in a separate container for recycling or disposal.
SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid all sources of ignition. Take precautionary measures against static discharges. Provide thorough sealing and grounding of process equipment. Provide input-extract and local ventilation of work zones to ensure that the occupational exposure limit is not exceeded. In case of insufficient ventilation, wear suitable respiratory equipment (See Section: 8). Regularly control work zone air. Do not swallow. Avoid contact with eyes. Do not ingest or inhale combustion or decomposition products. Workers should be protected from the possibility of contact with molten product.

7.2 Storage precautions
Store in a dry, well-ventilated area, at temperature not exceeding 40 °C. Keep away from direct sunlight, atmospheric precipitation and incompatible substances in a closed container.

7.3 Specific end use(s)
Please check the identified uses given in Section 1.2 of this safety data sheet.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits
For Poly(styrene-co-butadiene) (CAS: 9003-55-8): not established

Occupational Exposure Limits for the possible products of thermal-oxidative degradation (see section 10.6):

for Styrene: International Limit Values

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>LTEL 8 hr TWA ppm</th>
<th>LTEL 8 hr TWA mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrene CAS #100-42-5</td>
<td>20</td>
<td>85</td>
<td>80</td>
<td>340</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>20</td>
<td>85</td>
<td>80</td>
<td>340</td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>50</td>
<td>216</td>
<td>100</td>
<td>432</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>50</td>
<td>215</td>
<td>23.3 (1)</td>
<td>46.6 (1)</td>
<td>100 (1)</td>
</tr>
<tr>
<td>Germany (AGS)</td>
<td>20</td>
<td>86</td>
<td>40 (1)</td>
<td>172(1)</td>
<td></td>
</tr>
<tr>
<td>Germany (DFG)</td>
<td>20</td>
<td>86</td>
<td>40</td>
<td>172</td>
<td></td>
</tr>
<tr>
<td>Hungary</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>10</td>
<td>30(1)</td>
<td></td>
<td>(1) 15 minutes average value</td>
<td></td>
</tr>
<tr>
<td>Poland</td>
<td>50</td>
<td>200</td>
<td>172</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spain</td>
<td>20</td>
<td>86</td>
<td>40</td>
<td>172</td>
<td></td>
</tr>
</tbody>
</table>

1) GESTIS International Limit values:
http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx

Note: (1) Restrictive statutory limit values Restrictive statutory limit values will come into force on 1 July 2014
8.1.2 DNEL/ PNEC values

8.1.2.1 For Poly(styrene-co-butadiene)
DN(M)ELs for workers have not been derived.
DN(M)ELs for the general population have not been derived.
DNEL and PNECs for freshwater, saltwater, sediment and soil have not been derived.

8.1.2.2 For Styrene (CAS 100-42-5; EINECS 202-851-5)

**DN(M)ELs for workers**
- Acute - systemic effects, inhalation 289 mg/m³
- Acute - local effects, inhalation 306 mg/m³
- Long-term - systemic effects, dermal 406 mg/kg bw/day
- Long-term - systemic effects, inhalation 85 mg/m³

**DN(M)ELs for the general population**
- Acute - systemic effects, inhalation 174.25 mg/m³
- Acute - local effects, inhalation 182.75 mg/m³
- Long-term - systemic effects, dermal 343 mg/kg bw/day
- Long-term - systemic effects, inhalation 10.2 mg/m³
- Long-term - systemic effects, oral 2.1 mg/kg bw/day

**PNEC water**
- PNEC aqua (freshwater): 0.028 mg/L
- PNEC aqua (marine water): 0.0028 mg/L
- PNEC aqua (intermittent releases): 0.04 mg/L

**PNEC sediment**
- PNEC sediment (freshwater): 0.614 mg/kg sediment dw
- PNEC sediment (marine water): 0.0614 mg/kg sediment dw

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8.2 Exposure controls

8.2.1 Technical safety measures
Provide adequate forced-air and exhaust ventilation in work zones.
Compulsory monitoring of air conditions in work areas.
Sealing and grounding of equipment and communications.
Usage of intrinsically safe equipment.

8.2.2 Personal protection equipment
Use of personal protective equipment must be consistent with good occupational hygiene practices.
Hygiene measures:
Personal hygiene and industrial sanitation in the production at the facility (wash hands at the end of each work shift and before eating, drinking, smoking or using the toilet).

**Eye/face protection**
Wear Goggles giving complete protection to eyes (BS EN 166).

**Skin protection (hand and body)**
Wear approved protective gloves (Nitrile rubber. BS EN 374)
If contact with hot product is anticipated, gloves should be heat-resistant and thermally insulated.
Wear insulating gloves BS EN407 (heat).
Wear apron or other protective clothing and antistatic boots.
Respiratory Protection
Not required (if is used workplace conditions).
In emergency or in case of increase of hazardous substances concentration at the workplace wear positive pressure MSHA/NIOHS-approved self-contained breathing apparatus (BS EN 14387:2004).

8.2.3 Environmental Exposure Controls
None specific.
Do not allow penetration of the product into water reservoirs, surface and ground water, sewer ducts and soil.
Preventing disposal into water reservoirs of contaminated water without treatment.
Provide sealing of process equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state (at 20 °C and 1013 hPa)</td>
<td>Hard homogeneous elastic mass Thermoplastic rubber is produced in the form of powder and granules (powdered).</td>
<td>visual method</td>
<td></td>
</tr>
<tr>
<td>Colour</td>
<td>from white to light-yellow</td>
<td>yellowness index measurement using an automatic spectrometer</td>
<td></td>
</tr>
<tr>
<td>Odour</td>
<td>Peculiar, at processing temperatures slight odour of organic compounds is possible.</td>
<td>sensory examination</td>
<td></td>
</tr>
<tr>
<td>pH (Value)</td>
<td>Not applicable, insoluble.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Melting Point (°C)</td>
<td>&gt; 200</td>
<td>ASTM E537-98</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point/boiling range (°C)</td>
<td>Not available.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Ignition temperature (°C)</td>
<td>378</td>
<td>ISO 4589-84 (GOST 12.1.044)</td>
<td></td>
</tr>
<tr>
<td>Auto Ignition Temperature (°C)</td>
<td>440</td>
<td>ISO 4589-84 (GOST 12.1.044)</td>
<td></td>
</tr>
<tr>
<td>Flash-point (°C)</td>
<td>232</td>
<td>GOST 12.1.044</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Does not ignite spontaneously, burn only upon entering into a source of fire.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Upper/lower flammability or Explosive limit ranges</td>
<td>Not available.</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Vapour Pressure (hPa):</td>
<td>Not available (does not evaporate)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>Not available (does not evaporate)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>0.94-0.96</td>
<td>ASTM D 792</td>
<td></td>
</tr>
<tr>
<td>Solubility (Water)</td>
<td>Insoluble</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>soluble in benzene, toluene</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient n-Octanol/Water</td>
<td>Not available.</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
### SECTION 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity
Stable under all ordinary circumstances at ambient temperatures. Oxidizes, hydrogenates.

#### 10.2 Chemical stability
Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions
None specific.

#### 10.4 Conditions to avoid
Avoid high temperatures, naked flames, sparks, long term exposure to direct sunlight, contact with incompatible materials.

#### 10.5 Materials to avoid
Oxidising agents, acids, alkalis, oils, gasoline, kerosene oil

#### 10.6 Hazardous decomposition products
None under normal conditions at ambient temperatures
Thermal decomposition products can include trace amounts of styrene. Combustion products: carbon oxides.

### SECTION 11. TOXICOLOGICAL INFORMATION

#### General information
No significant health hazard in normal industrial use conditions.

<table>
<thead>
<tr>
<th>Property</th>
<th>Results</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routes of Exposure</td>
<td>The substance is a non-volatile thermoplastic rubber and is produced in the form of powder and granule. There is therefore no potential for inhalation exposure.</td>
<td></td>
</tr>
<tr>
<td><strong>Acute toxicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>LD50 (oral/rat): &gt; 5000 mg/kg. LD50 (dermal/rabbit): &gt;2000 mg/kg</td>
<td>FBEPH. BT#001343, 1998</td>
</tr>
<tr>
<td>Inhalation</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>Results</td>
<td>Remarks</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Irritation/Corrosivity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin irritation/corrosion</td>
<td>Not classified. Skin contact with melted/heated product may cause serious thermal burns.</td>
<td></td>
</tr>
<tr>
<td>Eye irritation</td>
<td>Not classified. Contact with eyes may cause mechanical damage. Eye contact with melted/heated product may cause serious thermal burns. Thermal decomposition products may cause irritation of eye.</td>
<td></td>
</tr>
<tr>
<td>Respiratory tract</td>
<td>Not classified. Thermal decomposition products inhalation may cause irritation of respiratory system.</td>
<td></td>
</tr>
<tr>
<td>Sensitization</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Respiratory system</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Repeated dose toxicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic oral toxicity</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Chronic inhalation toxicity</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Chronic dermal toxicity</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In vitro data</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>In vivo data</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects on fertility</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Developmental toxicity</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>single exposure</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>repeated exposure</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Other effects</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12. ECOLOGICAL INFORMATION**

**General information**
At normal conditions thermoplastic rubber is a very stable product. Product does not form toxic compounds with other substances in air and water. The product is poorly biodegradable but does not pose a hazard to the environment.
Pollution of water ponds and soil with rubber flakes may occur only if production, handling and transportation rules are not followed, in case of effluent discharge without treatment, as a result of emergencies and accidents.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic toxicity:</td>
<td>Not expected to be acutely toxic, but material may mechanically cause adverse effects if ingested by waterfowl or aquatic life.</td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Aquatic invertebrates</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Sediment organisms</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Toxicity to soil macro-organisms/micro-organisms</td>
<td>Not classified. No data available.</td>
<td></td>
</tr>
<tr>
<td>Toxicity to terrestrial plants</td>
<td>Not classified. No data available.</td>
<td>t₁/₂: &gt; 30 d extremely stable FBEPH. BT#001343, 1998</td>
</tr>
</tbody>
</table>

Water hazard classification: According to the German VwVwS: WGK- 0 (not classified).

**SECTION 13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**
Disposal should be in accordance with local, state and national legislation. Waste water has to be treated. Packaging waste shall be collected and send for recycling. Rubber waste shall be removed to disposal.

**13.2 Additional Information**
European Waste Code (2001/118/EC): 19 12 04 plastic and rubber

**SECTION 14. TRANSPORT INFORMATION**

**General**
The product is not covered by international regulations on the transport of dangerous goods.
UN: none.

**SECTION 15. REGULATORY INFORMATION**

**15.1 EU regulations**
Authorisations: Not applicable.
Restrictions on use: None
15.2 National regulations
Unknown.

15.3 Chemical Safety Assessment
Chemical Safety Assessment (CSA) is not required for the substance since it is not subject to registration as a polymer according to the provisions of Article 2(9) of REACH.

Chemical Safety Report has been performed for monomers: 1,3-butadiene (CAS #106-99-0; EC #203-450-8), styrene (CAS #100-42-5; EC #202-851-5).

### SECTION 16. OTHER INFORMATION

#### 16.1 Indication of changes

<table>
<thead>
<tr>
<th>VERSION</th>
<th>Date of change</th>
<th>Section</th>
<th>Description of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version: 1.0</td>
<td>28/04/2013</td>
<td>All</td>
<td>Initial SDS.</td>
</tr>
</tbody>
</table>
| Version: 1.1 | 20/03/2014 | 1.1; 3; 16.1 | 1. Section 1.1. Information about “silicon dioxide “was added.  
2. Section 3. Information about “silicon dioxide“ was added.  
3. Section 16.1 was updated. |
| Version: 1.2 | 25/07/2016 | 1.3; 2 | Section 1.3: Supplier’s contact details were updated.  
Section 2: Only classification and labelling according CLP are given. |

#### 16.2 Abbreviations and acronyms

- **AGS**  The German Committee on Hazardous Substances (Ausschuss für Gefahrstoffe – AGS)
- **DFG**  Germany Research Foundation
- **DNEL**  Derived No Effect Level
- **LD50**  Lethal Dose to 50% of a test population (Median Lethal Dose)
- **LTEL**  Long Term Exposure Limit
- **OSHA**  Occupational Safety & Health Administration (USA)
- **PEC**  Predicted No Effect Concentration
- **PNEC**  Predicted No Effect Concentration
- **PBT**  Persistent, bioaccumulative, toxic chemical
- **vPvB**  Very Persistent, Very Bioaccumulative
- **STEL**  Short Term Exposure Limit
- **STOT**  Specific Target Organ Toxicity
- **TWA**  Time Weighted Average

#### 16.3 Key literature references and sources

**EU DIRECTIVES**


REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and


NATIONAL REGULATIONS (GERMANY)
Major Accident Hazard Legislation 82/501/EWG.

Russian Register of Potentially Hazardous Chemical and Biological Substances (FBEPH). BENZENE, ETHENYL-, POLYMER WITH BUTA-1,3-DIENE. Dossier of potentially hazardous chemical and biological substance BT# 001343, 1998, Ministry of Health of the Russian Federation.

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END OF SDS