

# VORONEZH SYNTHETIC RUBBER JSC

## SAFETY DATA SHEET

According to EC Regulations 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010

### STYRENE-BUTADIENE THERMOPLASTIC RUBBER (SBS) Block-Copolymer

### GRADE DST-30R-01

Version: 2.2  
Created: 28/03/2014

#### 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	DST -30R-01 (equals to SBS -30R-01)
Registration # for 1,3-butadiene (CAS #106-99-0; EC #203-450-8) Index No(CLP): 601-013-00-X	01-2119471988-16-0034 01-2119471988-16-0033
Registration # for styrene (CAS #100-42-5; EC #202-851-5) Index No(CLP): 601-026-00-0	01-2119457861-32-0016
Registration # for oil filler (CAS #64742-54-7; EC #265-157-1) Index No(CLP): 649-467-00-8	01-2119484627-25-0035
Registration # for silicon dioxide (CAS # 7631-86-9/ 112926-00-8; EC# 231-545-4)	01-2119379499-16-XXXX

#### 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  $\geq 1$  % by weight for non-gaseous mixtures posing human health or environmental; or
- in an individual concentration of  $\geq 0.1$  % by weight for non-gaseous mixtures that is carcinogenic category 1,2 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 REACH; or
- a substance for which there are Community workplace exposure limits.

In accordance with mentioned above, this product does not require an official SDS as per Regulations (EC) No 1907/2006 (articles 31.1; 31.2) and Commission Regulation (EU) No 453/2010.

This 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 Relevant identified uses of the substance

1.2.1 Most common technical function of Styrene-butadiene thermoplastic rubber: used for preparation of bituminous, roofing and road construction materials, shoe bottom compositions, glue, adhesive, medical goods, general mechanical rubber goods for plastic modification.

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-Élysées, 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

### Suppliers:

Company name: Voronezhsynthetkauchuk JSC  
Address: 2, Leninsky avenue, Voronezh, Russian Federation, 394014  
Phone: +7 4732 20 65 26  
Fax: +7 4732 20 68 96, 20 68 19  
Email Address: office@vrnsk.vrn.ru  
Emergency phone: +7 4732 49 09 00 (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)

## SECTION 2. HAZARDS IDENTIFICATION

### Classification:

#### 2.1. Classification of the substance or mixture

2.1.1 Classification according to Directive 67/548/EEC  
Not classified as a dangerous substance.

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

#### 2.2 Label elements

2.2.1 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.

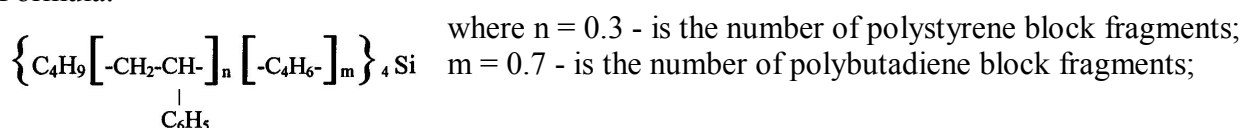
Combustible solid.

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

This product is a synthetic thermoplastic rubber, consisting of at least 92% co-polymer from styrene and butadiene (with 27-31% bound styrene), oil filler ≤ 6.5% (CAS# 64742-54-7, EC# 265-157-1), 0.2-0.8% antioxidant (CAS# 128-37-0/ EC# 204-881-4 or CAS # 2082-79-3 / EC # 218-216-0), adhesion reducing powder: about 0.3% calcium distearate (CAS # 1592-23-0/ EC# 216-472-8) or 0,2 – 0,5% silicon dioxide (CAS # 7631-86-9/ EC# 231-545-4).

May contain traces of styrene (< 0.02%).

Formula:



According to CLP Regulation the product is a mixture of poly(styrene-co-butadiene) and oil filler (Distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified):

Name	EC #	CAS #	Content,%	Classification EC#67/548/EEC and EC#1272/2008 (CLP)
Poly(styrene-co-butadiene)	none	9003-55-8	≥ 92.0	None
Distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified (oil filler)	265-157-1	64742-54-7	≤ 6.5	None <sup>1)</sup>
2,6-di-tert-butyl-p-cresol	204-881-4	128-37-0	≤ 0.8	<sup>2)</sup> Aquatic Chronic 1. H410: Very toxic to aquatic life with long lasting effects (M-Factor chronic = 1) <sup>2)</sup> Aquatic Acute Category 1. H400: Very toxic to aquatic life (Additional hazard classes)

<sup>1)</sup>The substance is not classified as carcinogenic (GHS08, Carc 1B, H350) as it complies with Note L having polynuclear aromatic hydrocarbon content <3% determined in accordance with IP 346 (dimethyl sulfoxide extraction) (Annex VI – Regulation EC 1272/2008)

<sup>2)</sup> Notified classification and labelling according to CLP criteria. No Harmonised C&L (Table 3.1 Annex VI, Index #: None). The substance is not PBT/vPvB.

Reference: <http://echa.europa.eu/information-on-chemicals>

The product contains impurity (CAS #128-37-0) which is embedded in the polymer and is not released by the product under advised handling and storage conditions. Therefore the polymer is not to be regarded as «Very toxic to aquatic life» in the form in which it is placed at the market.

## 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 and 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:

Combustion generates irritating and toxic fumes.

Burning causes emissions of carbon oxide.

Unusual fire & explosion hazards: None.

### 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

### Personal precautions:

#### 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.

#### 6.5 Reference to other sections:

For additional information, refer to Section 8, Exposure Controls and Personal Protection equipment.

## 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<sup>1)</sup>

SUBSTANCE	LTEL 8 hr TWA ppm	LTEL 8 hr TWA mg/m <sup>3</sup>	STEL ppm	STEL mg/m <sup>3</sup>	Note
Styrene CAS #100-42-5					
Austria	20	85	80	340	
Belgium	50	216	100	432	
France	50	215 23.3 (1)	46.6 (1) 100 (1)	200(1)	(1) Restrictive statutory limit values Restrictive statutory limit values will come into force on 1 July 2014
Germany (AGS)	20	86	40 (1)	172(1)	(1) 15 minutes average value
Germany (DFG)	20	86	40	172	
Hungary		50		50	
Latvia		10		30(1)	(1) 15 minutes average value
Poland		50		200	(1) Ceiling limit value
Spain	20	86	40	172	

<sup>1)</sup> GESTIS International Limit values:

[http://bgia-online.hvbg.de/LIMITVALUE/WebForm\\_ueliste.aspx](http://bgia-online.hvbg.de/LIMITVALUE/WebForm_ueliste.aspx)

for Oil (mist)

No.	COMPONENT	Limit value, mg/m <sup>3</sup>	
		Long term exposure 8 hours	Short term exposure 15 minutes
1.	Oil (mist)	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

**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/m<sup>3</sup>

Acute - local effects, inhalation 306 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 406 mg/kg bw/day

Long-term - systemic effects, inhalation 85 mg/m<sup>3</sup>

**DN(M)ELs for the general population**

Acute - systemic effects, inhalation 174.25 mg/m<sup>3</sup>

Acute - local effects, inhalation 182.75 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 343 mg/kg bw/day

Long-term - systemic effects, inhalation 10.2 mg/m<sup>3</sup>

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

**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/NIOSH-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**

Property	Value	Method	Remarks
Physical state (at 20 °C and 1013 hPa):	Hard homogeneous elastic mass Thermoplastic rubber is produced in the form of powder and granules (powdered)	visual method	
Colour:	from white to light-yellow		yellowness index measurement using an automatic spectrometer
Odour:	Peculiar, at processing temperatures slight odor of organic compounds is possible	sensory examination	
pH (Value):	Not applicable, insoluble	-	
Melting Point (°C):	> 200 °C	ASTM E537-98	
Initial boiling point/boiling range (°C):	Not available	-	
Ignition temperature (°C):	255 ± 15	ISO 4589-84 (GOST 12.1.044)	
Auto Ignition Temperature (°C):	330 ± 15	ISO 4589-84 (GOST 12.1.044)	
Flash-point (°C):	232	GOST 12.1.044	
Evaporation rate:	Not available	-	
Flammability (solid,	Does not ignite spontaneously,	-	



Property	Value	Method	Remarks
gas):	burn only upon entering into a source of fire		
Upper/low flammability or Explosive limit ranges:	Not available	-	
Vapour Pressure (hPa):	Not available (does not evaporate)	-	
Vapour Density (Air=1):	Not available (does not evaporate)	-	
Density (g/cm <sup>3</sup> ):	0.930-0.940	ASTM D 792	
Solubility (Water):	Insoluble		
Solubility (Other):	soluble in benzene, toluene		
Partition Coefficient n-Octanol/Water:	Not available	-	
Decomposition Temperature (°C):	Not available	-	
Explosive properties:	Non explosive	-	
Oxidising properties:	Not available	-	
<b>Other information:</b>	None		

**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.

According to CLP Regulation the product is a mixture of poly(styrene-co-butadiene) and oil filler (distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified)

Property	Synthetic poly (styrene-co-butadiene) rubber (CAS #9003-55-8)	Distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified (oil filler) (CAS #64742-54-7; EC #265-157-1)
<b>Acute toxicity:</b>	LD50/oral/rat: > 5000 mg/kg LD50/dermal/rabbit: >2000 mg/kg Inhalation toxicity: very low toxicity. The substance is a non-volatile hard elastic mass and is produced in the form of powder, granule crumb (powdered). There is therefore no potential for inhalation exposure.	LD50 /oral/rat : >5000 mg/kg OECD guideline 401  LD50/dermal/rabbit: >2000 mg/m <sup>3</sup> OECD Guideline 402 (Acute Dermal Toxicity)  LC50/inhalation: 1.80 to 2.55 mg/L for insufficiently refined lubricant base oil. OECD Guideline 403 (Acute Inhalation Toxicity)
<b>Irritation and corrosion:</b>	Not irritating or corrosive	Not irritating or corrosive (Concawe consortium studies)
<b>Sensitisation:</b>	Not sensitizing	Not sensitizing (Concawe consortium studies)
<b>Carcinogenicity:</b>	Not carcinogenic	As the DMSO extract determined in accordance with IP 346 is < 3% w/w, the product is not classified as carcinogenic (Concawe consortium studies)
<b>Mutagenicity:</b>	Not mutagenic	Not mutagenic From the evaluation of the data obtained in vivo and in vitro on the “OLBO” category (other lubricant base oils), which includes the product, it results that this category of lubricating oils is not mutagenic (Concawe consortium studies)
<b>Toxicity for reproduction:</b>	Not investigated	Not toxic for reproduction (toxicological studies on reproduction and growth according to OECD 421 or 422 – Concawe consortium).
Reference	Russian Register of Potentially Hazardous Chemical and Biological Substances /FBEPH/ BT#001343, 1998	SDS for oil filler from the supplier (version, Jan.14.2011); <a href="http://apps.echa.europa.eu/registered/data/dossiers">http://apps.echa.europa.eu/registered/data/dossiers</a> (CAS #64742-54-7)

**SECTION 12. ECOLOGICAL INFORMATION**

**General information:**

No significant ecological hazard in normal industrial use conditions.

<b>Property</b>	<b>Synthetic poly (styrene-co-butadiene) rubber (CAS #9003-55-8)</b>	<b>Oil filler: distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified (CAS #64742-54-7; EC #265-157-1)</b>
<b>General information</b>	At normal conditions thermoplastic rubber is a very stable product. Does not form toxic compounds with other substances in air and water. Pollution of water ponds and soil with polymer 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.	The substance is not classified as dangerous for the environment.
<b>Aquatic toxicity:</b>	Not investigated.	<p>Acute aquatic toxicity Toxicity to fish (<i>Pimephales promelas</i>): LD50(96 h): &gt;100 mg/l OECD Guideline 203 (Fish, Acute Toxicity Test)</p> <p>Toxicity test on aquatic invertebrates (<i>Daphnia magna</i>): EL50 (48 h): &gt;10 000 mg/l OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)</p> <p>Toxicity to algae growth inhibition (<i>Pseudokirchnerella subcapitata</i>): NOEL (72 h) &gt;100 mg/l OECD Guideline 201 (Alga, Growth Inhibition Test)</p> <p>Toxicity to microorganisms (breath inhibition on active mud), 4 days  (<i>Photobacterium phosphoreum</i>): NOEL &gt;1.93 mg/l tested species DIN method 38412, part 34 for the investigation of water: bioluminescence inhibition</p>
<b>Biodegradation:</b>	Abiotic degradation: $t_{1/2}$ : > 30 d extremely stable.	31.13 % degradation after 28 d (O <sub>2</sub> consumption) OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)

<b>Property</b>	<b>Synthetic poly (styrene-co-butadiene) rubber (CAS #9003-55-8)</b>	<b>Oil filler: distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified (CAS #64742-54-7; EC #265-157-1)</b>
<b>Mobility:</b>	Not investigated	The product is not soluble in water In case of accidental releases: - it floats at water surface, forming a film that prevents the process of normal oxygen transfer in water; - it is absorbed in the soil and may cause deep water infestation
<b>Results of PBT and vPvB assessment:</b>	Can be stated that the substance does not fulfill the PBT criteria (not PBT) and not the vPvB criteria (not vPvB)	No hydrocarbon structure that meets the PBT/vPvB criteria (Concawe consortium)
<b>Reference:</b>	Russian Register of Potentially Hazardous Chemical and Biological Substances /FBEPH/ BT#001343, 1998	SDS for oil filler from the supplier (version, Jan.14.2011); <a href="http://apps.echa.europa.eu/registered/data/dossiers">http://apps.echa.europa.eu/registered/data/dossiers</a> (CAS #64742-54-7)

## 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:

None known.

VERSION: 2.2  
DATE CREATED: 28/03/2014

### 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) and distillates (petroleum), hydrotreated heavy paraffinic. Base oil – unspecified / CAS #64742-54-7; EC #265-157-1 (oil filler).

## SECTION 16. OTHER INFORMATION

### 16.1 Indication of changes:

VERSION	Date of change	Section	Description of changes
Version: 1.0	16/03/2010		First edition created according to recommendations of Regulations (EC) #1907/2006 (Article 31.1).
Version: 2.0	07/02/2011	1.1, 2; 3	Section 1.1; 2; 3 was updated.
Version: 2.1	11/04/2012	1.1; 1.3; 2; 3; 4-6; 9-13; 15; 16	<ol style="list-style-type: none"> <li>1. Section 1.1 was updated.</li> <li>2. DISCLAIMER was added on the first page.</li> <li>3. Section 1.3 was updated (E-mail address, Emergency phone for suppliers).</li> <li>4. Section 2: Specific hazard subsection was updated.</li> <li>5. Section 4: General information subsection was added. Inhalation subsections was updated.</li> <li>6. Section 5: Extinguishing media, Special firefighting procedures were updated.</li> <li>7. Section 6: Individual safety measures, Environmental precautions were updated.</li> <li>8. Section 7: Storage precautions, Handling subsections were updated.</li> <li>9. Section 8: Personal protective equipment, Hygiene measures, Technical safety measures subsections were updated.</li> <li>10. Section 13: Disposal methods subsection was updated.</li> <li>11. Sections 3, 9-12; 15, 16 were completely updated.</li> </ol>
Version: 2.2	28/03/2014	All	All Sections were completely updated.

### 16.2 Relevant R-phrases, Hazard-and EU Hazard-statements

**Labelling: none.**

**R-phrases: none.**

**S-phrases: none.**

### 16.3 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

## 16.4 Key literature references and sources

### EU DIRECTIVES

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

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 mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Regulations. Commission regulation (EU) no 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations

Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labeling of dangerous substances.

COMMISSION DECISION of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes (notified under document number (2001/118/EC).

### 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