

KRASNOYARSK SYNTHETIC RUBBERS PLANT JSC

SAFETY DATA SHEET

According to Regulations (EC) 1907/2006 (REACH), (EC) 1272/2008 (CLP) & (EU) 2015/830

NITRILE BUTADIENE RUBBER (NBR)

Version: 2.8

Created: 18/12/2018

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

1.1. Product identifier

Name of Substance:	Poly(acrylonitrile- <i>co</i> -butadiene) Butadiene-acrylonitrile copolymer
Name of IUPAC:	Poly(prop-2-enenitrile - <i>co</i> -buta-1.3-diene)
Synonyms:	Butadiene-acrylonitrile rubber
Product name, Grades:	NITRILE BUTADIENE RUBBER (NBR) NBR 1840 (17-20% bound acrylonitrile) NBR 1845 (17-20% bound acrylonitrile) NBR 1850 (17-20% bound acrylonitrile) NBR 1855 (17-20% bound acrylonitrile) NBR 1860 (17-20% bound acrylonitrile) NBR 1870 (17-20% bound acrylonitrile) NBR 1865 (17-20% bound acrylonitrile) NBR 1875 (17-20% bound acrylonitrile) NBR 1880 (17-20% bound acrylonitrile) NBR 1885 (17-20% bound acrylonitrile) NBR 1890(17-20% bound acrylonitrile) NBR 1895 (17-20% bound acrylonitrile) NBR 2630 (27-30% bound acrylonitrile)

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.

Product name, Grades:

NBR 2635 (27-30% bound acrylonitrile)
NBR 2640 (27-30% bound acrylonitrile)
NBR 2645 (27-30% bound acrylonitrile)
NBR 2650 (27-30% bound acrylonitrile)
NBR 2655 (27-30% bound acrylonitrile)
NBR 2660 (27-30% bound acrylonitrile)
NBR 2665 (27-30% bound acrylonitrile)
NBR 2670 (27-30% bound acrylonitrile)
NBR 2675 (27-30% bound acrylonitrile)
NBR 2680 (27-30% bound acrylonitrile)
NBR 2685 (27-30% bound acrylonitrile)
NBR 2690 (27-30% bound acrylonitrile)
NBR 2695 (27-30% bound acrylonitrile)
NBR 3330 (31-35% bound acrylonitrile)
NBR 3335 (31-35% bound acrylonitrile)
NBR 3340 (31-35% bound acrylonitrile)
NBR 3345 (31-35% bound acrylonitrile)
NBR 3350 (31-35% bound acrylonitrile)
NBR 3355 (31-35% bound acrylonitrile)
NBR 3360 (31-35% bound acrylonitrile)
NBR 3365 (31-35% bound acrylonitrile)
NBR 3370 (31-35% bound acrylonitrile)
NBR 3375 (31-35% bound acrylonitrile)
NBR 3380 (31-35% bound acrylonitrile)
NBR 3385 (31-35% bound acrylonitrile)
NBR 3390 (31-35% bound acrylonitrile)
NBR 3395 (31-35% bound acrylonitrile)
NBR 4040 (36-40% bound acrylonitrile)
NBR 4045 (36-40% bound acrylonitrile)
NBR 4050 (36-40% bound acrylonitrile)
NBR 4055 (36-40% bound acrylonitrile)
NBR 4060 (36-40% bound acrylonitrile)
NBR 4065 (36-40% bound acrylonitrile)
NBR 4070 (36-40% bound acrylonitrile)
NBR 4075 (36-40% bound acrylonitrile)
NBR 4080 (36-40% bound acrylonitrile)
NBR 4085 (36-40% bound acrylonitrile)
NBR 4090 (36-40% bound acrylonitrile)
NBR 4095 (36-40% bound acrylonitrile)
NBR 18100 (17-20% bound acrylonitrile)
NBR 18105 (17-20% bound acrylonitrile)
NBR 18110 (17-20% bound acrylonitrile)
NBR 26100 (27-30% bound acrylonitrile)
NBR 26105 (27-30% bound acrylonitrile)
NBR 26110 (27-30% bound acrylonitrile)
NBR 26115 (27-30% bound acrylonitrile)
NBR 33100 (31-35% bound acrylonitrile)
NBR 33105 (31-35% bound acrylonitrile)
NBR 33110 (31-35% bound acrylonitrile)

Product name, Grades: NBR 33115 (31-35% bound acrylonitrile)
NBR 40100 (36-40% bound acrylonitrile)
NBR 40105 (36-40% bound acrylonitrile)
NBR 40110 (36-40% bound acrylonitrile)
NBR 40115 (36-40% bound acrylonitrile)

Registration #
for 1.3-butadiene: 01-2119471988-16-0034
(CAS #106-99-0; EC #203-450-8)
Index No(CLP): 601-013-00-X
for acrylonitrile: 01-2119474195-34-0017
(CAS #107-13-1; EC #203-466-5)
Index No(CLP): 608-003-00-4

1.2. Relevant identified uses of the substance

1.2.1. Identified use(s)

Production of technical rubber parts/technical rubber goods.

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 phone: +33 1 42 99 73 50
Fax: +33 1 42 99 73 99
Email address: didier.lebout@gazprom-mt.com

Suppliers

Company name: Krasnoyarsk Synthetic Rubbers Plant JSC
Address: Kauchukovy side street, 6, Krasnoyarsk, Krasnoyarsk region, 660004,
Russian Federation
Phone: +7 391 270 79 00
Fax: +7 391 270 79 00*315
Email address: OfficeSK@kzsk.ru
Emergency phone: +7 391 270 79 01 (office time only, GMT+7);
+7 967 601 78 78 (round the clock)

1.4. 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

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 (CLP)

Not classified as a hazardous substance.

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 (CLP)

Not applicable.

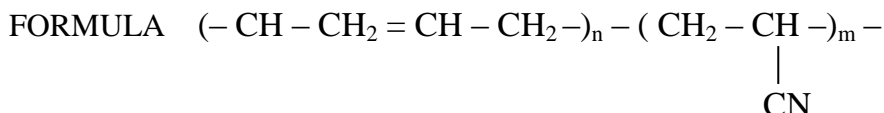
2.3. Specific hazard

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 rubber, consisting of at least 95% poly(acrylonitrile-*co*-butadiene), 0.2 - 0.4% antioxidant (CAS#119-47-1 / EC# 204-327-1); 3.0 - 3.5% fatty acids, C₁₄₋₁₈ and C₁₆₋₁₈-unsatd., magnesium salts (CAS #67762-32-7 / EC#267-010-7).



where n = is the number of polybutadiene block fragments, m = is the number of polybutadiene block fragments of acrylonitrile.

Name	EC #	CAS #	Content	Classification EC#1272/2008 (CLP)
poly(acrylonitrile- <i>co</i> -butadiene)	none	9003-18-3	≥ 95.0%	none
6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol	204-327-1	119-47-1	0.2 ÷ 0.4%	Repr. 2 H361 (Suspected of damaging fertility or the unborn child. Route of exposure: Oral) <i>(Notified classification and labelling according to CLP criteria, No Harmonised C&L)</i>

The product contains impurity (CAS #119-47-1) 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 harmful for the environment or «Suspected of damaging fertility or the unborn child» 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: Spontaneous penetration of Butadiene-acrylonitrile rubber into human organism is impossible.

Rubber at normal conditions is stable non-volatile, causes non-exhaustive effects.

No significant health hazard in normal industrial use conditions.

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: 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: Processing vapours 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

Use water or water spray, foam, dry chemical, carbon dioxide, chalk, sand.

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

Combustible substance. Ignited by naked flame. 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

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(acrylonitrile-*co*-butadiene) (CAS: 9003-18-3): not established

8.1.2. DNEL/ PNEC values: For poly(acrylonitrile-*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.

8.2. 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

9.1. Information on basic physical and chemical properties

Property	Value	Method
Physical state (at 20 °C and 1013 hPa)	Elastic solid (rubber is produced in the form of briquettes)	visual method
Colour	light yellow to brown	-
Odour	Peculiar	sensory examination
pH (Value)	Not applicable, insoluble	-
Melting Point (°C)	Not available.	-
Initial boiling point/boiling range (°C)	Not available.	-
Ignition temperature (°C):	295±15	ISO 4589-84 (GOST 12.1.044)
Auto Ignition Temperature (°C)	355±15	ISO 4589-84 (GOST 12.1.044)
Flash-point (°C)	Not available.	-
Evaporation rate	Not available.	-
Flammability (solid, gas)	Does not ignite spontaneously, 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 ³)	0.94- 1.0	ASTM D 792
Solubility (Water)	Insoluble	-
Solubility (Other)	soluble in ketones, ethyl acetate, chloroform insoluble in fats	-

Property	Value	Method
Partition Coefficient n-Octanol/Water	Not available.	-
Decomposition Temperature (°C)	≈ 430	-
Viscosity (Mooney Viscosity) conv.units (at 100 °C) @ 4 min	30 – 120	ASTM D 1646
Explosive properties	Non explosive.	-
Oxidising properties	Not available.	-
Granulometry, mm	Not available (substance is not marketed or used in granular form).	-

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable under all ordinary circumstances at ambient temperatures.

Undergoes oxidation, chloration, hydrogenation, vulcanization.

If heated over 150 °C gets solid quickly.

10.2. Chemical stability

Stable under normal conditions.

At temperatures ≈ 430 °C decomposed emitting hydrogen cyanide.

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, alkalis, acids.

10.6. Hazardous decomposition products

None under normal conditions at ambient temperatures.

Products of combustion and thermal destruction: carbon monoxide, carbon dioxide, hydrogen cyanide nitrous oxides, soot.

SECTION 11: TOXICOLOGICAL INFORMATION

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

Property	Results
Routes of Exposure	The substance is a non-volatile rubber and is produced in the form of briquettes. There is therefore no potential for inhalation exposure.
Acute toxicity	
Oral	LD 50 (oral, mice, rats): > 10 000 mg/kg (FBEPH. # BT 000686, 1995)
Inhalation	Not classified. No data available.
Dermal	Not classified. No data available.

Property	Results
Routes of Exposure	The substance is a non-volatile rubber and is produced in the form of briquettes. There is therefore no potential for inhalation exposure.
Acute toxicity	
Irritation/Corrosivity	
Skin irritation/corrosion	Not classified. Skin contact with melted/heated product may cause serious thermal burns.
Eye irritation	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.
Respiratory tract	Not classified. Thermal decomposition products inhalation may cause irritation of respiratory system.
Sensitization	
Skin sensitization	Not classified. No data available
Respiratory system	Not classified. No data available
Repeated dose toxicity	
Chronic oral toxicity	Not classified. No data available
Chronic inhalation toxicity	Not classified. No data available
Chronic dermal toxicity	Not classified. No data available
Germ cell mutagenicity	
In vitro data	Not classified. No data available
In vivo data	Not classified. No data available
Carcinogenicity	Not classified. No data available
Toxicity for reproduction	
Effects on fertility	Not classified. No data available
Developmental toxicity	Not classified. No data available
single exposure:	Not classified. No data available
repeated exposure:	Not classified. No data available
Other effects	None

SECTION 12: ECOLOGICAL INFORMATION

General information: At normal conditions 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.

Property	Value	Remarks
Aquatic toxicity: Not expected to be acutely toxic, but material may mechanically cause adverse effects if ingested by waterfowl or aquatic life.		
Fish	Not classified. No data available.	
Aquatic invertebrates	Not classified. LC50 (96 h): >100 mg/L (<i>Oncorhynchus mykiss</i>)	FBEPH. BT# 000686, 1995
Sediment organisms	Not classified. LC50 (48 h): >100 mg/L (<i>Daphnia Magna</i>) LC50 (48 h): >100 mg/L (<i>Scenedesmus quadricauda</i>)	FBEPH. BT# 000686, 1995
Toxicity to soil macro-organisms/micro-organisms	Not classified. No data available.	
Toxicity to terrestrial plants	Not classified. No data available.	
Persistence and degradability	No specific ecological data are available for this product. This water-insoluble rubber is expected to be inert in the environment. No appreciable biodegradation is expected.	$t_{1/2}$: > 30 d extremely stable FBEPH. BT# 000686, 1995
Environmental distribution	No specific ecological data are available for this product.	
Bioaccumulation	Effects on nature due to bioaccumulation are not known.	
Results of PBT and vPvB assessment	Not classified as PBT or vPvB.	
Other adverse effects	No information available.	

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) and acrylonitrile (CAS #107-13-1; EC #203-466-5).

SECTION 16: OTHER INFORMATION

16.1. Indication of changes

VERSION	Date of change	Section	Description of changes
Version: 1.0	22/03/2010		First edition created according to recommendations of Regulations (EC) #1907/2006 (Article 31.1).
Version: 2.0	07/02/2011	1.1, 2	Section 1.1, 2 was updated
Version: 2.1	19/12/2011	1.1; 1.2; 2; 3; 5; 9; 10; 11; 12; 15; 16	<ol style="list-style-type: none"> Product name SKN and grade's names were renamed into NBR. Index No (CLP) was added to Section 1.1 Name of IUPAC was changed in Section 1.1 DISCLAIMER was added on the second page Specific hazard subsection was fully updated in Sections 2 and 5. LD 50 was added in Section 11. LC50 was added in Section 12. Sections 1.2, 3, 9, 10; 15, 16 were fully updated.
Version: 2.2	14/06/2013	1.1; 1.2; 2; 11-13; 15; 16.2	<ol style="list-style-type: none"> Grades NBR 1865, 26110, 26115, 40115 were added to Section 1.1. Sections 1.2; 2; 11-13 were fully reconfigured. Sections 15 was fully updated. Sections 16.2; 16.3 were updated.
Version: 2.3	17/03/2014	1.1; 3; 8; 9; 16.1; 16.2	<ol style="list-style-type: none"> Grades NBR 1870, NBR 1875, NBR 1880, NBR 1885, NBR 1890, NBR 1895, NBR 18100, NBR 18105, NBR 18110; NBR 2695, NBR 26100, NBR 26105; NBR 3395, NBR 33100, NBR 33105, NBR 33110, NBR 33115; NBR 4095, NBR 40100, NBR 40105, NBR 40110, NBR 40115 were added to Section 1.1. Sections 3, 8, 9, 16.1; 16.2 were updated. Sections 4, 5, 6, 7; 10 were fully reconfigured.

VERSION	Date of change	Section	Description of changes
Version: 2.4	08/06/2015	2.1; 3, 16.1; 16.2	1. Section 3. Composition was updated. 2. Sections 2.1, 3 were updated according to CLP classification of the mixture 3. Section 16.2 from the previous version was removed. Section 16 was renumbered.
Version: 2.5	11/07/2016	1.3	Supplier's contact details were updated.
Version: 2.6	06/07/2018	1.3	The Only Representative contact details were updated.
Version: 2.7	02/08/2018	9.1	Melting point and flash point parameters were updated.
Version: 2.8	18/12/2018	3	Composition data were updated.

16.2. Abbreviations and acronyms

LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
LC50	Lethal Concentration to 50 % of a test population
PBT	Persistent, bioaccumulative, toxic chemical
vPvB	Very Persistent, Very Bioaccumulative
UN	United Nations
WGK	Wassergefährdungsklasse (<i>German: Water Hazard Class</i>)
PBT	Persistent, bioaccumulative, toxic chemical
vPvB	Very Persistent, Very Bioaccumulative

16.3. 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 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.

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).

Russian Register of Potentially Hazardous Chemical and Biological Substances (FBEPH). NITRILE BUTADIENE RUBBER (NBR). Dossier of potentially hazardous chemical and biological substance # BT 000686, 1995, Ministry of Health of the Russian Federation.

DISCLAIMER

This information is based on our current level of knowledge. This information may be subject to revision as new knowledge and experience becomes available, and SIBUR makes no warranties and assumes no liability in connection with any use of this information. Since SIBUR cannot be aware of all aspects of your business and the impact the REACH Regulation has for your company, SIBUR strongly encourages you to get familiar with the REACH Regulation in order to comply with its requirements and timelines.

END OF SDS