SAFETY DATA SHEET

Based on resolution (EC) 1907/2006 of Parliament and Council of Europe (REACH) ISO 11014:200, WHMIS-Canada, EU /830/2015

Trade name: ***Polybutadiene rubber, neodymium PBR (SKDN)***
Date of elaboration: 2010-10
Updated: 2018-05
Revision: 2.3 instead of v.2.2 from 2017-02

1 Identification of substance/mixture Identification of company/enterprise

Identification of substance/mixture:	**Polybutadiene rubber** **Neodymium PBR (SKDN)**
REACH registration number:	Butadiene (monomer) **01-2119471988-16-0032**
Synonyms:	Polybutadiene
Molecular formula:	$(-CH2-CH=CH-CH_2-)_n$
Application:	Production of high-impact polystyrene; tire industry and production of rubber technical goods
1.3Producer/importer/distributor:	
Supplier/producer	PJSC Nizhnekamskneftekhim
Address	RF, Tatarstan, 423574, Nizhnekamsk PJSC Nizhnekamskneftekhim
Telephone/fax	+7(8555)377445
MSDS prepared by:	e-mail: …nknh@nknh.ru… ShuvalovaOV@nknh.ru, BayazitovaLH@nknh.ru
Special representative:	
Designation	Oy Nizhex Scandinavia Ltd
Address	Wavulinintie 10 HELSINKI 00210 Finland Jari Taipale
Telephone/fax	+35 896824700
e-mail:	jari.taipale@nizhex.fi
Emergency telephone number: - product recipient country - country of origin	To be specified in each country by the consumer. See Section 16 of this SDS +7 (8555) 37-72-07, (8555) 37-78-30, +7 (8555) 37-72-65, (8555) 37-74-45 8.00 am – 5.00 pm in workdays

2 Identification of hazard

2.1 Classification

This product is **not** classified as hazardous according to Directives 67/548/EC, 1999/45/EC и Постановлению (ЕС) №1272/2008 (CLP)

Information on special hazards for humans and environment:

Negative physical and chemical effects: none

Adverse health effects and their symptoms:

Eye contact	For open systems where the contact is most probable the particles may hurt the surface of the eye and cause mechanical irritation.
Skin contact	In case of contact with heated polymer: redness of skin, pain, burn injury.
Inhalation	Rubber does not contain high volatile fractions, no pollutant emissions during storage.
Ingestion	Ingestion is unlikely. It does not pose a hazard to health if swallowed.

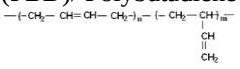
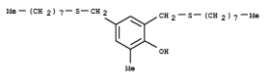
Adverse environmental impact: No environmental threat

2.2 Label elements not applicable

2.3 Other hazards: transformation in the environment at long-term atmospheric effects (atmospheric precipitation, solar radiation and cold or high temperatures).

3 Composition / Information on components

3.1 Substance information

Chemical name/ Synonyms	EC number	REACH number	Index number	CAS number	Concentration (%)	Classification based on Resolution (EC) No. 1272/2008 [CLP]	
						Class of hazard / category of hazard	Symbol of hazard
Polybutadiene rubber (PBD)/ Polybutadiene 	none	No registration required	none	9003-17-2	>99,4	Not classified	
Stabilizers:							
4,6-bis(octylthiomethyl)-o-cresol / Irganox 1520L 	402-860-6	No registration required	none	110553-27-0	>0,2	Not classified	

4 First aid measures

4.1 Description of first aid measures

General:	Low hazard material. Intoxication through entry to human body has not been defined and unlikely.
Inhalation:	It has no effect at environmental temperature.
Skin contact:	It has no effect at environmental temperature. Wash with water and soap.
Eye contact:	Wash with plenty of water until the product is removed from eyes.
Ingestion:	No influence. When small amount of rubber crumb swallowed, no special measures should be taken.
Advice to physician:	none

4.2 Most important symptoms and effects, both acute and delayed

Eye contact	For open systems where the contact is most probable the particles may hurt the surface of the eye and cause mechanical irritation.
Skin contact	In case of contact with heated polymer: redness of skin, pain, burn injury.
Inhalation	Rubber does not contain high volatile fractions, no pollutant emissions during storage.
Ingestion	Ingestion is unlikely. It does not pose a hazard to health if swallowed.

4.3. Indication of any immediate medical attention and special treatment needed

Consult a doctor.

5 Fire safety measures

5.1 Extinguishing media

Recommended fire-extinguishing means	Dry chemical foam, fine sprayed water or mist, carbon dioxide, sand or earth could be used only in case of small fire. Fire-extinguishers of any type, water, vapor, fire-extinguishing foams, inert gases, sand, asbestos cloth.
Prohibited fire-extinguishing means	Prohibited fire extinguishing means are not established.
5.2 Special exposure hazards arising from the substance or mixture	Carbon oxides and dioxides. When heated the product could decompose to form carbon oxide, separation of butadiene is possible. Carbon oxides reduce oxygen (O_2) content in the air, they could have a toxic effect on the cells causing the cell respiration disturbance. Butadiene – narcotic action at high concentrations, mucous membrane irritation at low concentrations, functional deviance in the central nervous system.
5.3 Advice for fire fighters	Use a fire-resistant suit and a self-contained breathing apparatus Remove personnel not participating in fire-fighting from the site of the fire.

6 Measures of prevention and management of emergencies

6.1 Individual protection means	Use a fire-resistant suit and a self-contained breathing apparatus
6.2 Environmental protection measures	Contamination of water bodies and soil should be excluded.

6.3 Methods of neutralization, removal and cleaning	Solid product in the form of bales. Collect the product and put it in the appropriate containers for disposal or reuse.
6.4 Supplementary recommendation	None

7 Handling and storage

7.1 Handling

Advice on safety handling

Protective measures	Arrangement of suction-and-exhaust ventilation and local ventilation system. Use of hermetically sealed equipment in production. Equipment grounding is a mandatory requirement. Use of personal protective equipment.
Incompatible substances	Storage together with oxidizers, acids or alkalis shall not be allowed.
Measures for prevention of spraying and dusting	Provide dilution-exhaust ventilation and local ventilation. Use closed production equipment. Use only in places with adequate ventilation.
Safeguards for the environment	Reduction of rubber losses during transportation and storage, prevent discharges to water basins and sewerage.
Industrial health:	Use of personal protective equipment. After working with the product should be washed.

7.2 Conditions for safe storage

Precautions against fire and explosion:	Avoid open flame sources. Use a tool which does not cause a spark
Technical measures and conditions of storage:	Product is stored indoors at ambient temperature, beyond the reach of fire sources, direct sunlight and atmospheric precipitations, away from heat sources. Rubber packed in the woven polypropylene bags is stored in the stacks not higher than 1.2 meters Rubber packed in the box pallets is stored in the stacks with no more than four pallets in the stack
Packaging materials:	- polystyrene film; - polyethylene film; - woven polypropylene bags; - multipurpose plastic container; - wooden box pallet;
Requirements to the premises and storage tanks	Indoor temperature should not exceed 30°C.

Other information on storage conditions	The period of storage is 1 year maximum.

7.3 Specific end uses: no

8 Exposure control and personal protective equipment

8.1Exposure limits. Threshold limit value/relatively safe level of hazardous substances in the working area	Due to physical and chemical properties and low toxicity there is no requirement for establishment of hygienic rating in the air.
8.2 Exposure control at the working place	Ensuring that the content of harmful substances is within permissible concentrations by using combined extract and input ventilation in locations of the most contaminant air.
Individual protection means	Use protective clothing made of cotton fabric.
Respiratory protection	Not required under normal operating conditions. In case of emergency – filter gas-mask, breating masks.
Hand protection	Gloves made of cotton fabric.
Eye protection:	Only in the case of crushing of material in the open systems.
Skin protection	Protective clothing made of cotton fabric.
Control of environmental impact	Concentration of pollutants should be measured in the process of thermal treatment.
Consumer exposure control:	Not used in everyday life.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Solid product bale of white color.
Odor	No odor or slight odor
Odor threshold	Not established
pH	Not applicable
Boiling temperature	Not applicable
Freezing temperature/melting point	Above 150 C°
Flash point	Not applicable
Explosive limits/ limits of flammability in the air	Not applicable
Self-ignition temperature	Above 303°C
Vapor pressure	Not applicable
Density	0.9 g/cm3 at 20°C
Solubility in water	Not soluble
Solubility in other solvents	Soluble in hexane, toluene, benzene, chloroform, carbon tetrachloride

9.2 Other information none

10 Stability and reactivity

Contains stabilizer

10.1 Activity	Oxidized, hydrogenated, halogenated reacted with bromine, thiols, maleic anhydride, chloral, nitroso compounds, carbenes.
10.2 Stability	Extremely stable under normal conditions
10.3 Possibility of dangerous reactions	Upon contact with an open flame is lit smoky flame
10.4 Conditions resulting in dangerous reactions	Heating above the melting temperature. Avoid contact with oxidizing agents, acids, alkalis.
10.5 Materials causing dangerous reactions	Strong oxidizers, acids, alkalis, combustible and easily flammable substances.
10.6 Dangerous decomposition products	Carbon oxides, butadiene

11 Toxicological properties

11.1. Information on toxicological effects

Oral toxicity at single ingestion	Non toxic
Skin toxicity at single exposure	Non toxic
Toxicity at inhalation at single exposure	Non toxic
Skin irritation	Causes no irritation
Eye irritation	Causes no irritation
Irritation of respiratory tract	Causes no irritation
Sensibilization	Absence
Toxicity at repeated dosage	Absence
Mutagenicity	Absence
Carcinogenicity	Not established
Toxicity for reproductive function and development	Absence

12 Environmental impact

12.1 Toxicity:	
Ecotoxicity:	Rubber bales do not pose a hazard for environment
12.2 Persistence and degradability:	Transforms in the environment at long weather impact (atmospheric precipitation, solar radiation, cold, high temperatures).
12.3 Bioaccumulative potential:	Non cumulative
12.4 Mobility:	Solid product
12.5 PBT/vPvB:	Does not meet criteria.

12.6 Other negative effects: Not established

13 Utilization and/or disposal of waste (remains)

13.1 Methods of waste (remains) disposal

Solid waste generated in the course of rubber processing is not toxic, it does not require neutralization and is subject to processing. Non-treatable waste is subject to incineration at the specialized landfill.

Code of waste
07 02 99 wastes from the MFSU of synthetic rubber (not otherwise specified)

14 Safety requirements during transportation

ADR / RID	Not classified
IMDG	Not classified
IATA	Not classified
IMO	Not classified
Class	Not classified
Packaging group	-
Classification code	-
Hazard identification number	-
UN number	Not classified
Precise name for transportation	Synthetic rubber SKD-N (Каучук СКД-N)

15 Regulatory information

National legislative documents:

Resolution (EC) 1907/2006 of the Parliament and the Council of Europe dated 18.12.2006 concerning registration, evaluation and authorization and restriction of chemicals (REACH), establishing the European Chemical Agency and adding the Directive 1999/45/EC and cancelling the Resolution of the Council (EEC) 793/93 and the Resolution of Commission (EC) 1488/94 as well as the Directive of the Council 76/769/EEC and the Directives of Commission 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

16 Supplementary information

Information sources: ESIS – European Chemical Substances Information System (European Chemicals Bureau).
Hazardous Substance Data Bank (HSDB) – U.S. National Library of Medicine, 2001-1
ECHA – European Chemical Agency

National emergency telephone numbers:

Country	Phone number
Austria	+43 1 406 43 43 Poison Control Centre
Belgium	070 245 245 Centre antipoisons
Bulgaria	+35 929 154 233 Национален токсикологичен информационен център
Croatia	(+385 1) 23-48-342 Poison Control centre
Cyprus	+35 7 22405611 Department of Labour Inspection
Czech Republic	+420 224 919 293, +420 224 915 402 Toxikologické informační středisko
Denmark	82121212 (round-the-clock) AKUTHJAELP VED FORGIFTNING
Estonia	16662 (круглосуточно), (+372) 626 93 90 Poisoning Information Centre
Finland	09 471977, 094711 (round-the-clock) Poison Information Centre
France	+33 0145425959 (round-the-clock) ORFILA (INRS)
Germany	+ 49 231 9071 2971 BAuA Information Centre
Greece	No information
Hungary	(1-800)201-199 (round-the-clock) Az Egészségügyi Toxikológiai Tájékoztató
Iceland	+354 543 2222 Eitrunarmiðstöð
Ireland	01 8092566 , 01 8379964 National Poisons Information Centre
Italy	+39 06 59 94 37 33 Telephone (for technical and scientific issues)
Latvia	+371 67042473 National emergency telephone
Liechtenstein	No information
Lithuania	+370 52 20 5236, +370687 53378 Neatidėliotina informacija apsinuodijus
Luxembourg	070 245 245 Centre antipoisons
Malta	21243314 – Florianna, 22563000 – Rabat, 22695701/2 – Mosta.
Netherlands	030-2748888 Just for the information of the medical staff in cases of acute intoxication
Norway	22 59 13 00 (round-the-clock) Giftinformasjonen
Poland	No information
Portugal	808 250 143
Romania	No information
Slovakia	No information
Slovenia	No information
Spain	+ 34 91 562 04 20
Sweden	112 – ask poisions
United Kingdom	No information

Legend of abbreviations

№ CAS – registry number of the substance in Chemical Abstracts Service
№ EC – EINECS and ELINCS Number
CLP – Classification, Labelling and Packaging
PBT – Persistent, Bioaccumulative and Toxic substance
vPvB – very Persistent, very Bioaccumulative substance
DNEL – Derived No Effect Level
DMEL – Derived Minimum Effect Level
PNEC – Predicted No Effect Concentration
LD-50 – Lethal Dose to 50% of a test population (Median Lethal Dose)
LC-50 – Lethal Concentration to 50 % of a test population
NOAEC – No observed Adverse Effect Levels
EC-50 – half maximal Effective Concentration
ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road
RID – Regulations concerning the International Carriage of Dangerous Goods by Rail
ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IMDG – International Maritime Dangerous Goods
IATA – International Air Transport Association
IMO – International Maritime Organization
SU – Sector of Use
PROC – Process Category

Information in this Safety Data Sheet is based on the current state of knowledge and legislation in force and refers solely to the description of rules for safe work with the product. This product should not be used for purposes other than those specified in section 1. The consumer is fully responsible for fulfilling of all the requirements of local rules and laws. The above information shall not guarantee the product quality.