

# 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:** 2019-06

**Revision:** 2.4 instead of v.2.3 from 2018-05

## 1 Identification of substance/mixture Identification of company/enterprise

### Identification of substance/mixture:

REACH registration number:

Synonyms:

Molecular formula:

Application:

**Polybutadiene rubber**

**Neodymium PBR (SKDN)**

Butadiene (monomer) **01-2119471988-16-0032**

Polybutadiene

$(-CH_2-CH=CH-CH_2-)_n$

Tire industry and production of rubber technical goods

### 1.3 Producer/importer/distributor:

Supplier/producer

Address

Telephone/fax

MSDS prepared by:

PJSC Nizhnekamskneftekhim

RF, Tatarstan, 423574, Nizhnekamsk

PJSC Nizhnekamskneftekhim

+7(8555)377445

e-mail: ...nknh@nknh.ru...

[ShuvalovaOV@nknh.ru](mailto:ShuvalovaOV@nknh.ru),

[BayazitovaLH@nknh.ru](mailto:BayazitovaLH@nknh.ru)

### Special representative:

Designation

Address

Telephone/fax

e-mail:

Oy Nizhex Scandinavia Ltd

Wavulinintie 10

HELSINKI 00210

Finland

Jari Taipale

+35 896824700

[jari.taipale@nizhex.fi](mailto: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 (EC) №1272/2008 (CLP)

### Information on special hazards for humans and environment:

Negative physical and chemical effects: none

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## 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.


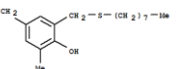
Adverse environmental impact: No environmental threat

**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 $\text{---}(\text{CH}_2\text{---CH}=\text{CH---CH}_2\text{---})_n\text{---}(\text{---CH}_2\text{---CH}(\text{CH}_2\text{---})\text{---})_m\text{---}$ 	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

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## 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<sub>2</sub>) 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.

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<b>6.3 Methods of neutralization, removal and cleaning</b>	Solid product in the form of bales. Collect the product and put it in the appropriate containers for disposal or reuse.
<b>6.4 Supplementary recommendation</b>	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

Safeguards for the environment

Industrial health:

Provide dilution-exhaust ventilation and local ventilation. Use closed production equipment. Use only in places with adequate ventilation. Reduction of rubber losses during transportation and storage, prevent discharges to water basins and sewerage.

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.

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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

<b>8.1 Exposure limits.</b> 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.
<b>8.2 Exposure control at the working place</b>	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 Respiratory protection	Use protective clothing made of cotton fabric. Not required under normal operating conditions. In case of emergency – filter gas-mask, breathing 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/cm <sup>3</sup> 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

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## 10 Stability and reactivity

Contains stabilizer

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

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**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

<b>ADR / RID</b>	Not classified
<b>IMDG</b>	Not classified
<b>IATA</b>	Not classified
<b>IMO</b>	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

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Changes:

Version: 2.2 Revision due to the requirements of the EU / 830/2015 Directive

2.3 Update at the request of the consumer

2.4 Section 1 application, Section 16 Phone numbers

## National emergency telephone numbers:

Country	Phone number
Austria	+43 1 406 43 43
Belgium	070 245 245
Bulgaria	0887 088 440
Croatia	+385 1 2348 342
Cyprus	+35722405611, +357 22 40 56 08
Czech Republic	+420 224 919 293, +420 224 915 402
Denmark	+45 82 12 12 12, Tel: +45 72 54 40 00
Estonia	+372 62 69 379, +372 794 3500
Finland	0800 147 111, 09 471 977
France	+ 33 (0)1 45 42 59 59, +33 3 83 22 50 50
Germany	+49 30-18412-3460, + 49 (0) 231 9071 2971
Greece	(0030) 2107 793 777
Hungary	(+36-80) 201-199
Iceland	+354 543 2222, +354 543 1000
Ireland	+353 1 8092566, 1 8379964
Italy	+39 0649906140, +39 0649902064, +39 06 68593726
Latvia	+371 67032600, +371 67042473
Liechtenstein	+423 236 64 00
Lithuania	+ 370 70662008, 8-5 236 20 52
Luxembourg	+ 352 24785551, 070 245 245
Malta	+356 2395 2000, (356) 25454184 / 25454286
Netherlands	+31 88 75 585 61
Norway	+47 73 58 05 00, 22 59 13 00
Poland	+48 42 25 38 400, +48 42 2538 424; +48 42 2538 427
Portugal	+ 351 213 303 271, 808 250 143
Romania	+40 21 318 36 06, +40 21 207 11 06
Slovakia	+ 421 2 5465 2307, +421 2 4854 4511
Slovenia	+386 1 400 60 51
Spain	+34 917689800, + 34 91 562 04 20
Sweden	112, +46104566750, 010-456 6700
United Kingdom	+44 121 507 4123

## 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



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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 In-land 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.