

# SAFETY DATA SHEET



Based on Regulation (EC) 1907/2006 of the European Parliament and of the Council (REACH), ISO 11014:2009, WHMIS-Canada, EU /830/2015

**Trade mark:** *Brominated Butyl Rubber*

**Date of elaboration:** 2010-10

**Updated:** 2019-04

**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

Application:

### **Producer/importer/distributor:**

Supplier/producer

Address

Telephone/fax

MSDS prepared by:

### **Special representative:**

Designation

Address

Telephone/fax

e-mail:

Emergency telephone number:

- product recipient country

- country of origin

### ***Brominated Butyl Rubber***

Isobutylene (monomer): **01-2119456616-32-XXXX**

Isoprene (monomer): **01-2119457891-29-XXXX**

Bromine : **01-2119461714-37-XXXX**

Co-polymer of isobutylene and isoprene,  
brominated

Tire and technical rubber industry

PJSC Nizhnekamskneftekhim

RF, Tatarstan, 423574, Nizhnekamsk

PJSC Nizhnekamskneftekhim

+7(8555)377445

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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 Hazards identification

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## 2.1 Classification

This product is **not** classified as hazardous according to Directive (EC) №1272/2008 (CLP)

### Information pertaining to special dangers for human and environment:

Adverse physicochemical effects: none

Adverse human health effects and symptoms:

EYE CONTACT: For open systems where the contact is most probable the particulates may injure eye surfaces and cause mechanical irritation.  
SKIN CONTACT: In case of exposure to hot polymer: redness, pain , burn.  
INHALATION Rubber does not contain highly volatile fractions and there are no pollutant emissions during storage.  
INGESTION: Entry inside is unlikely. No hazard when swallowed.

Adverse environmental effects: Not environmentally hazardous.

**2.2 Label elements** not applicable

**2.3 Other hazards:** Undergoes transformation in the environment at long-term weather impact ( atmospheric precipitation, solar irradiation, coldness, high temperatures)

## 3 Composition / Information on components

### 3.1 Substance information:

Chemical name/synonyms	EC-No	Reach No.	CAS-No	Amount %	Classification according Regulation (EC) No 1272/2008 [CLP]	
					Class/ Category of danger	Identification of danger
Polymer 2-methylprop-1-ene with 2-methylbutadi-1,3-ene brominated	none	Not subject to registration	68441-14-5	>97.65	not classified	
Stabilizers						
Irganox 1076 Octadecyl 3-(3,5-di-tert-butyl-4- hydroxyphenyl) propionate)	218-216-0	Not subject to registration	2082-79-3	>0.05	not classified	
Other impurities						
Calcium stearate	216-472-8	Not subject to registration	1592-23-0	<2.3	not classified	

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## 4 First aid measures

### 4.1 Description of first aid measures

GENERAL:	Low hazard material. Intoxication through entry into human body has not been defined and is unlikely.
INHALATION:	No hazard at ambient temperature.
SKIN CONTACT:	No hazard at ambient temperature. Wash with water and soap. In case of contact with hot product , immediately wash with large amount of water. Apply a clean gauze or cotton fabric bandage.
EYE CONTACT:	Wash with plenty of water to remove the product from eyes.
INGESTION:	No hazard. When small amount of rubber crumb is swallowed, no first aid measures are required.
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 particulates may injure eye surfaces and cause mechanical irritation.
SKIN CONTACT:	In case of exposure to hot polymer: redness, pain , burn.
INHALATION	Rubber does not contain highly volatile fractions and there are no pollutant emissions during storage.
INGESTION:	Entry inside is unlikely. No hazard when swallowed.

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

Consult a doctor.

## 5 Fire fighting 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, water vapor, fire-extinguishing foams, inert gases, sand, asbestos cloth.
Prohibited fire-extinguishing means	Prohibited fire extinguishing means are not established.

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## 5.2 Special exposure hazards arising from the substance or mixture

Carbon oxides and dioxides.  
Heated product decomposes and emits carbon oxide (CAS No. 124-38-9), hydrogen bromide emission is possible as well (CAS No. 10035-10-6).

## 5.3 Advice for fire fighters

Carbon oxides reduce oxygen (O<sub>2</sub>) content in the air; they may have a toxic effect on the cells causing the cell respiration disturbance. Hydrogen bromide has a percutaneous action, affects the central nervous system (Xi; R:35-37).

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 Personal protection

Use a fire-resistant suit and a self-contained breathing apparatus

### 6.2 Environmental protection measures

Contamination of water bodies and soil should be avoided.

### 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

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Advices on safe handling:	Arrangement of supply-and-exhaust ventilation system and local ventilation. Use of pressure tight equipment for production. Equipment grounding is mandatory. Use of personal protection equipment.
Incompatible substances Industrial health:	Storage together with oxidizers, acids and caustics is prohibited. Use of personal protective equipment. After working with the product should be washed.
Measures to prevent aerosol and dust generation:	Aerosol and dust are not generated when handling.
Measures required to protect the environment:	Minimization of rubber losses during transportation and storage , prevention of discharge into water, sewerage system.
Precautions against fire and explosion:	Open flame sources are not allowed.
<b>7.2 Conditions for safe storage</b>	The product shall be stored at the ambient temperature in the indoor area away from open fire sources, direct sunlight and atmospheric precipitations, away from heat sources. Rubber shall be stored packed in box pallets in stacks not higher than three pallets each.
Packaging materials:	<ul style="list-style-type: none"><li>- EVA film ( shrinkable);</li><li>- Polyethylene film</li><li>- General-purpose plastic containers;</li><li>- Wooden box pallet;</li></ul> The inside temperature should not exceed 30°C. Storage period – not more than 1 year.
<b>7.3 Specific end uses:</b>	<b>no</b>

## 8 Exposure control and personal protection

<b>8.1 Exposure limit values: Maximum permissible concentration of harmful substance in the working area /relatively safe level of hazardous substances in the working area</b>	Due to physical and chemical properties and low toxicity there are no hygienic regulations for the air exposure limits.
<b>8.2 Occupational exposure limits:</b>	Ensuring that the content of harmful substances is within permissible concentration limits by using supply-and-exhaust ventilation system in the most contaminant air locations.
Personal protection	Use protective clothing made of cotton fabric.

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Respiratory protection	Not required under normal operating conditions. In case of emergency – use filter gas-mask, breathing masks.
Hand protection	Gloves made of cotton fabric.
Eye protection:	Only in 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.
In everyday life:	Not used in everyday life.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	Solid product bale of light yellow color.
Odor	No odor or slight odor
Odor threshold	Not established
pH	Not applicable
Boiling temperature	Not applicable
Glass transition temperature	Minus 69°C
Flash point	267 deg. C (open crucible)
Ignition temperature	301 °C
Self-ignition temperature	402 °C
Vapor pressure	Not applicable
Density	0.9 g/cm <sup>3</sup> at 20 °C

### 9.2 Other information none

## 10 Stability and reactivity

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Contains stabilizer

<b>10.1 Activity</b>	Oxidized
<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 (130°C)
<b>10.5 Materials causing dangerous reactions</b>	Strong oxidizers
<b>10.6 Dangerous decomposition products</b>	Carbon oxides, hydrogen bromide

## 11 Toxicological properties

### 11.1. Information on toxicological effects

Acute oral toxicity	Non toxic
Acute dermal toxicity	Non toxic
Acute inhalative toxicity	Non toxic
Skin irritation	Causes no irritation
Eye irritation	Causes no irritation
Irritation to respiratory tract	Causes no irritation
Sensibilization	None
Repeated dose toxicity	None
Mutagenicity	None
Carcinogenicity	Not established

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Toxicity for reproductive function and development      None

## 12 Environmental impact

- 12.1 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 Bioaccumulation:** Non cumulative
- 12.4 Mobility:** Solid product
- 12.5 PBT/vPvB:** Does not meet criteria.
- 12.6 Other adverse effects:** Not established

## 13 Utilization and/or disposal of wastes (remains)

### 13.1 Methods of disposal of wastes (remains)

Solid wastes generated in the course of rubber processing are not toxic, they do not require neutralization and are subject to reprocessing. Non-treatable wastes are subject to incineration at the specialized landfill.

Code of wastes

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

S61 – avoid entry into the environment

## 14 Safety requirements during transportation

**ADR/RID**      Not classified

**IMDG**      Not classified

**IATA**      Not classified



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IMO	Not classified
Class	Not classified
Group of packing	--
Classification code	--
Hazard identification number	--
UN number	Not classified
Precise name for transportation	Bromobutyl rubber

## 15 Regulatory information

National legislative documents:

Regulation (EC) 1907/2006 of the European Parliament and the Council of 18.12.2006 concerning registration, evaluation and authorization of chemicals (REACH), establishing the European Chemical Agency and adding the Regulation 1999/45/EC and cancelling the Resolution (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 source: ESIS – European Chemical Substances Information System (European Chemicals Bureau)  
Hazardous Substance Data Bank (HSDB) – U.S. National Library of Medicine, 2001-1

Changes:

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

2.3 Updating

2.4 Section 16

**National emergency telephone numbers:**

Страна	Номер телефона
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

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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

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

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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 is not the guarantee of the product quality.