

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 name: *Chlorobutyl Rubber*

Issue Date: 2010-10

Review Date: 2018-06

Revision: 2.3 instead of revision 2.2 dated 2016-03

1 Identification of substance/mixture Identification of company/enterprise

Identification of substance/mixture:
REACH Registration No.:

Chlorobutyl Rubber

Isobutylene (monomer): **01-2119456616-32-0014**

Isoprene (monomer): **01-2119457891-29-0013**

Chlorine: **01-2119486560-35-0060**

Synonyms:

Copolymer of isobutylene and chloroisoprene

Molecular formula:

$[[C_4H_8]_m[C_5H_8Cl]_n]_x$

Application:

Production of high-impact polystyrene

Tire and rubber production industries

Unspecified applications were not identified

Producer/importer/distributor:

PJSC «Nizhnekamskneftekhim»

Supplier/producer

RF, Tatarstan, 423574, Nizhnekamsk

Address

Telephone/fax

+7(8555)377445

Person in charge for MSDS:

E-mail: nknh@nknh.ru

ShuvalovaOV@nknh.ru,

NasyrovaAV@nknh.ru

Special representative:

Name of company

Oy Nizhex Scandinavia Ltd

Person in charge

Jari Taipale

Address

Wavulinintie, 10

HELSINKI 00210

Finland

Telephone/fax

+35 896824700

E-mail:

jari.taipale@nizhex.fi

Emergency telephone number:

- product recipient country

To be specified in each country by the Consumer
Please refer to Section 16 hereof

- country of origin

+7 (8555) 37-72-07, (8555) 37-78-30,

+7 (8555) 37-72-65, (8555) 37-74-45

8.00 – 17.00 in workdays

2 Hazards identification

2.1 Substance classification:

This product is not classified as hazardous according to Regulation (EC) No. 1272/2008 (CLP).The

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substance is non-hazardous, nontoxic. No adverse health effects at room temperature.

Information pertaining to special dangers for human and environment:

Adverse physicochemical effects: None

Skin: Contact with hot product causes flushed skin, pain, burns.

Eyes: For open systems where contact is most likely, the particles of the product can damage the eye surface and cause mechanical irritation. Thermal degradation products cause eye pain, lacrimation, redness, irritation, burning.

Inhalation: Rubber does not contain volatile fractions, does not emit harmful substances when stored. The symptoms such as irritation of the upper respiratory tract, suffocation, cough, lacrimation, nausea, drowsiness, headache, loss of consciousness are observed due to influence of thermal degradation products only.

Ingestion: Poisoning symptoms were not determined. If swallowed may cause irritation of the gastrointestinal tract, like any foreign object.

Adverse environmental effects: Nonhazardous for environment

2.2 Marking elements:

Not applied

2.3 Other adverse hazards:

Undergoes transformation in the environment under prolonged influence of atmospheric conditions (atmospheric precipitations, solar irradiation, cold, high temperatures)

3 Composition/information on ingredients

3.1 Substance related information

Chemical name / Synonyms	EC No.	REACH No.	Ind ex No.	CAS No.	Amou nt (%)	Classification according to Regulation (EC) No 1272/2008 [CLP]	
						Hazard classes / Hazard categories	Hazards identification
Polymer of 2- methylprop-1-ene with 2-methylbutadi- 1,3-ene chlorinated	No	Not subject to registrati on	No	68081- 82-3	> 98.5	Not classified	
Stabilizers:							
Irganox 1010 Pentaerythritol tetrakis(3-(3,5-di-tert- butyl-4- hydroxyphenyl)propion ate)	229- 722-6	Not subject to registrati on	No	6683- 19-8	> 0.05	Not classified	
Other admixtures:							

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Calcium stearate	216-472-8	Not subject to registration	No	1592-23-0	< 1,4	Not classified
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4 First aid measures

4.1 Description of first aid measures

General information: Low hazard material. Intoxication through entry into human body has not been defined and is unlikely.

In case of inhalation: No hazard at ambient temperature

In case of skin contact: No hazard at ambient temperature. Wash with water and soap. In case of contact with hot product, wash immediately with plenty of cold water. Apply clean gauze or cotton bandage.

In case of eye contact: Wash with plenty of water until the product is removed from the eyes

In case of ingestion: No hazard. When small amount of rubber crumb is swallowed, first aid is not normally required.

4.2. Most important symptoms and effects, both acute and delayed

No influence at ambient temperature.

Skin: Contact with hot product causes flushed skin, pain, burns.

Eyes: For open systems where contact is most likely, the particles of the product can damage the eye surface and cause mechanical irritation. Thermal degradation products cause eye pain, lacrimation, redness, irritation, burning.

Inhalation: Rubber does not contain volatile fractions, does not emit harmful substances when stored. The symptoms such as irritation of the upper respiratory tract, suffocation, cough, lacrimation, nausea, drowsiness, headache, loss of consciousness are observed due to influence of thermal degradation products only.

Ingestion: Poisoning symptoms were not determined. If swallowed may cause irritation of the gastrointestinal tract, like any foreign object.

4.3 Prescription for immediate medical attention and special treatment

To visit a doctor.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media 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.

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Extinguishing media which must not be used for safety reasons	No unsuitable fire fighting media.
5.2 Special exposure hazard arising from the substance or mixture	Carbon oxides and dioxides. Heated product decomposes and emits carbon oxide (CAS No. 124-38-9), hydrogen chloride emission is possible as well. Carbon oxides reduce oxygen (O ₂) content in the air; they may have a toxic effect on the cells causing the cell respiration disturbance. Hydrogen chloride has a percutaneous action, in high concentrations it causes mucous membrane irritation, especially pituitary membrane, conjunctivitis, caligo corneae, choking sensation, running nose, cough.
5.3 Recommendations 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 for prevention and management of emergencies

6.1 Personal precautions	Use a fire-resistant suit and a self-contained breathing apparatus.
6.2 Environmental precautions	Contamination of water bodies and soil should be avoided
6.3 Methods for cleaning up and neutralization	Solid product in the form of bales. Collect the product and put it in the appropriate containers for disposal or reuse.
6.4 Additional information	None

7 Handling and storage

7.1 Handling

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.

Measures to prevent aerosol and dust generation

No generation of aerosols and dust at handling.

Incompatible substances
Measures required to protect the environment:

Do not store with oxidizers, acids and caustics.
Minimization of rubber losses during transportation and storage, prevention of discharges into surface waters and sewage.

Industrial hygiene

Use of personal protection equipment.

7.2. Safe storage conditions:

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Precautions against fire and explosion:	Open flame sources are not allowed, application of intrinsically safe tools only
Technical measures and storage conditions:	The product shall be stored indoors at the ambient temperature, away from open fire sources, direct sunlight and atmospheric precipitations, away from heat sources. Rubber packed in polypropylene textile bags shall be stored in stacks with max. height 1.2m. Rubber packed in pallet boxes shall be stored in stacks, not more than four pallet boxes stacked.
Packaging materials:	- polystyrene film - polyethylene film; - polypropylene textile bags - all-purpose plastic container; - Wooden pallet box.
Requirements for storage rooms and vessels:	Room temperature shall not exceed 30°C.
Further information on storage conditions:	Storage time – max. 1 year
7.3. Specific end use of the product	N/A

8 Exposure controls / personal protection

8.1 Exposure limits: MAC in working zone/SRLS in the working zone air	Due to physical and chemical properties and low toxicity there is no hygienic regulations for the air exposure limits
8.2 Occupational exposure controls	Ensuring that the content of hazardous substances is within permissible concentration limits by using supply-and-exhaust ventilation system in of the most contaminant air locations.
Personal protection equipment	Use protective clothing made of cotton fabric
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.
Body protection	Protective clothing made of cotton fabric
Environmental exposure controls	Concentration of pollutants should be measured in the process of thermal treatment.
Consumer exposure control:	Not used in household activity.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

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

Appearance	Solid baled product of light-yellow color
Odor	No odor or slight odor
Odor threshold	Not established
pH	Not applicable
Boiling temperature	Not applicable
Glass transition temperature	- 70 °C
Flash point	230 °C (open cup)
Ignition temperature	270 °C
Self-ignition temperature	412 °C
Vapor pressure	Not applicable
Density	0.9 g/cm ³ at 20 °C
Other information	N/A

10 Stability and reactivity

Contains a stabilizer

10.1 Reactivity

Oxidizing, hydrogenating, halogenating, interacting with bromine, thiol, maleic anhydride, chloral, nitroso compounds and carbenes

10.2 Chemical stability

Exclusively stable under normal conditions

10.3 Possibility of hazardous reactions

Upon contact with open fire it burns with smoking flame

10.4 Conditions to avoid

Heating above melting point. Exclude the contact with oxidizers, acids and caustics

10.5 Materials to avoid

Strong oxidizers, acids, caustics and flammable substances

10.6 Hazardous decomposition products

Carbon oxides, hydrogen chloride

11 Toxicological information

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	None
Toxicity at repeated dosage	None
Mutagenicity	None
Carcinogenicity	Not established
Toxicity for reproductive function and development	None

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12 Ecological information

12.1 Toxicity:	Rubber bales do not pose a hazard for environment
12.2 Persistence and degradability:	Transforms in the environment at prolonged weather impact (atmospheric precipitation, solar radiation, cold, high temperatures).
12.3 Bio-accumulative potential:	Noncumulative
12.4 Soil mobility	Solid product
12.5 Results of PBT/vPvB check:	Do not meet criteria
12.6 Other adverse effects:	Not established

13 Utilization and/or disposal of wastes (remains)

13.1 Methods of wastes (residues) disposal

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 specialized landfills.

Waste codes

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

Wooden packaging is subject to incineration or is used as solid fuel after respective processing. Polymer packaging is subject to subsequent reprocessing.

14 Safety requirements during transportation

ADR/ RID	Not classified
IMDG	Not classified
IATA	Not classified
ADN	Not classified
IMO	Not classified
Class	Not classified
Packing group	-
Classification Code	-
Hazard identification number	-
UN-No.	Not classified
Proper Shipping Name	Chlorobutyl rubber (Хлорбутилкаучук)

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15 Regulatory information

National regulations:

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 Other information

Data sources: ESIS – European Chemical Substances Information System (European Chemicals Bureau).
Hazardous Substance Data Bank (HSDB).-U.S. National Library of Medicine, 2001-1.
IFA – Data base on data basis on hazardous substances (GESTIS)
ECHA – European Chemicals Agency

Changes:

- Version. 2.1 Chlorine Registration Number
- 2.2. Revision due to the requirements of the EU / 830/2015 Directive
- 2.3 Updating

National emergency phones:

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 center
Cyprus	+35 7 22405611 Department of Labour Inspection
Czech Republic	+420 224 919 293, +420 224 915 402 Toxikologické informační středisko
Denmark	82121212 (twenty-four-hour) AKUTHJAE LP VED FORGIFTNING
Estonia	16662 (twenty-four-hour), (+372) 626 93 90 Poisoning Information Centre
Finland	09 471977, 094711 (twenty-four-hour) Poison Information Centre
France	+33 0145425959 (twenty-four-hour) ORFILA (INRS)
Germany	+ 49 231 9071 2971 BAuA Information Centre
Greece	No information available
Hungary	(1-800)201-199 (twenty-four-hour) Az Egészségügyi Toxikológiai Tájékoztató

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Island	+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 available
Lithuania	+370 52 20 5236, +370687 53378 Neatidėliotina informacija apsinuodijus
Luxemburg	070 245 245 Centre antipoisons
Malta	21243314 – Florianna, 22563000 – Rabat, 22695701/2 – Mosta.
The Netherlands	030-2748888 Only for purposes of instruction of medical staff in case of acute intoxication
Norway	22 59 13 00 (twenty-four-hour) Giftinformasjonen
Poland	No information available
Portugal	808 250 143
Romania	No information available
Slovakia	No information available
Slovenia	No information available
Spain	+ 34 91 562 04 20
Sweden	112 – ask for poison
United Kingdom	No information available

Legend explication

CAS No. – number of the substance in the registry of Chemical Abstracts Service

EC No. – number of the substance in the registry of European Chemicals Agency

CLP – (Classification, Labelling and Packaging) classification, labeling and packaging

PBT – persistent, bioavailable and toxic substance

vPvB – highly resistant substance with high bioavailable ability

DNELS – value of the set safe level of exposure

DMEL – value of the minimum level of exposure

PNEC – calculation of the estimated safe concentration

LD-50 – the average dose of the substance which causes the death of half of tested group

LC 50 – medium lethal concentration

NOAEC – (*No – observed – Adverse – Effect level*) maximum dose without harmful effects

EC 50 – concentration of compounds, exposure of which show the effect that equals to half of maximum effect

ADR – road transportation of goods under the European agreement concerning the international carriage of dangerous goods

RID – International regulations concerning the international carriage of dangerous goods by rail

ADN – European agreement concerning the international carriage of dangerous goods on inland waterway

IMDG – International Maritime Dangerous Goods Code

IATA – International Air Transport Association

IMO – International Maritime Dangerous Goods Code, developed and maintained by the

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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 handling of 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.