

SAFETY DATA SHEET



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

Trade Name: *CIS-isoprene synthetic rubber (SKI-3)*

Issue Date: 2010-11

Review Date: 2019-04

Revision: 3.5 instead of revision 3.4 dated 2018.06

1 Identification of substance/mixture Identification of company/enterprise

Identification of substance/mixture: Cis-1,4-polyisoprene Rubber
REACH Registration Number: Isoprene (monomer): 01-2119457891-29-0013
Synonyms: Cis-1,4-polyisoprene
Molecular formula: $(C_5H_8)_n$
Application: Tire and technical rubber industry
Producer/importer/distributor:
Supplier/producer PJSC «Nizhnekamskneftekhim»
Address RF, Tatarstan, 423574, Nizhnekamsk
Telephone/fax +7(8555)377445

Person in charge for MSDS: E-mail: nknh@nknh.ru
ShuvalovaOV@nknh.ru,
BayazitovaLH@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. Hazard Description:

This product is **not hazardous** as defined in Regulation No.1272/2008 (CLP). The substance is nonhazardous, nontoxic. No adverse human health effects at room temperature.

Information on special hazards for humans and environment:

Physical and chemical negative impact: None

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Negative impact on environment: Poses no hazard for environment.

2.2 Marking elements: Not applied

2.3. Other hazards: Transforms in the environment at long weather impact (atmospheric precipitation, solar radiation, cold, high temperatures).

3 Composition / Information on components

3.1 Substance Information:

Chemical name/ Synonyms	EC No.	REAC H No.	Index No.	CAS No.	Content (%)	Classification according to Directive (EC) № 1272/2008 [CLP]	
						Hazard class / Hazard Category	Hazard Designations
Polymer 2-methylbutadi- 1,3-ene	None	Not subject to registrat ion	None	9003- 31-0	>99,6	Not classified	
Stabilizer:							
1,4-Benzenediamine, N1- (2-ethylhexyl)-N4-phenyl- (C ₂₀ H ₂₈ N ₂)	None	Not subject to registrat ion	None	82209- 88-9	<0,3	Not classified	
Other admixtures:							
Calcium stearate	216- 472-8	Not subject to registrat ion	None	1592- 23-0	<0,06	Not classified	

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 air is not normally required.

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

No influence at ambient temperature.

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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

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| 5.1 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. |
| 5.2 Prohibited fire-extinguishing means | Prohibited fire extinguishing means are not established. |
| 5.3 Special hazards of the product exposure, hazardous products of combustion and thermal decomposition | Carbon oxides and carbon dioxides. Heated product decomposes and emits carbon oxide (CAS No. 124-38-9), isoprene emission is possible as well (CAS No. 78-79-5).
Carbon oxides reduce oxygen (O ₂) content in the air; they may have a toxic effect on the cells causing the cell respiration disturbance.
Isoprene – is toxic in high concentrations, causes mucous membrane irritation in low concentrations, causes functional deviance in the central nervous system. |
| 5.4 Personal protection and fire-extinguishing equipment | Use a fire-resistant suit and a self-contained breathing apparatus |
| 5.5 General recommendations | Remove personnel not participating in fire-fighting from the site of the fire. |

6 Measures for prevention and management of emergencies

- | | |
|--------------------------------|---|
| 6.1 Personal protection | Use a fire-resistant suit and a self-contained breathing apparatus. |
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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

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	Do not store with oxidizers, acids and caustics.
Measures required to protect the environment:	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:

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.

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Further information on Storage time – max. 2 year
storage conditions:

7.3. Specific end use of the product N/A

8 Exposure control and 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 are 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

Appearance	Solid product bale of grey color.
Odor	No odor or slight odor
Odor threshold	Not established
pH	Not applicable
Boiling temperature	Not applicable
Glass transition temperature	Minus 71°C
Flash point	275 deg. C (open crucible)
Ignition temperature	300 °C
Auto-ignition temperature	575 °C
Vapor pressure	Not applicable
Density	0.91 g/cm ³ at 20 °C
Solubility in water	Insoluble
Solubility in other solvents	Soluble in hexane, toluene, benzene, chloroform, tetrachloride
Appearance	Solid product bale of grey color.

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10 Stability and reactivity

Contains a stabilizer

10.1 Reactivity	Oxidized, hydrogenated, halogenated cyclized, isomerized undergoes oxidative degradation
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, isoprene

11 Toxicological properties

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

12 Environmental impact

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

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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 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)

Wooden packing is subject to incineration or is used as solid fuel after respective processing. Polymer packing 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	Isoprene rubber SKI-3 (Каучук СКИ-3)

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.

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16 Supplementary 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: 3.1 Revision due to the requirements of the EU / 830/2015 Directive

3.2 Section 3, composition

3.3 Updating

3.4 Section 7, Shelf Life

3.5 Section 16

National emergency telephone numbers:

Country	Telephone numbers
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

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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

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 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.