

KRALEX[®] type 1500

Safety Data Sheet

According to Regulation (EC) 1907/2006 (REACH).

Date of edition: 31/11/2010

Date of revision (Revision number): 05/12/2012 (1)

Previous editions and revision of this documents have lost their validity

1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1. Product identifier

Styrene - Butadiene rubber (SBR) / KRALEX 1500

1.2. Relevant identified uses of the mixture and uses advised against

Identified uses

Uses by industrial users

Use	Sector of use/Process category/Environmental release category*
Synthetic rubber processing (compounding, production of articles)	SU 3, SU 10 PROC 1, PROC 5, PROC 6, PROC 8a, PROC 8b, PROC 9, PROC 14, PROC 21 ERC 5

Uses by professional users

Use	Sector of use/Process category/Environmental release category*
Outdoor uses of rubber articles manufactured from the product by professional users	SU 22 PROC 21 ERC 10a
Indoor uses of rubber articles manufactured from the product by professional users	SU 22 PROC 21 ERC 11a

Uses by consumers

Use	Sector of use/Article category/Environmental release category*
Outdoor uses of rubber articles manufactured from the product by consumers	SU 21 AC 10 ERC 10a
Indoor uses of rubber articles manufactured from the product by consumers	SU 21 AC 10 ERC 11a

Uses advised against

None.

* nomenclature in accordance with guidance given in the document: Guidance on information requirements and chemical safety assessment Chapter R.12: Use descriptor system (version 2, March 2010)

1.3. Details of the supplier of the safety data sheet

Trade name: SYNTHOS Kralupy a.s.

Place of business: Wichterleho 810, Kralupy nad Vltavou, 278 01, Czech Republic

CRN: CZ 28214790

Telephone: exchange +420-315711111, commercial department +420-315712744, +420-315713245

Fax: +420-315 713 802; E-mail: synthos-cz@synthosgroup.com

1.4. Emergency telephone number

Emergency telephone number SYNTHOS Kralupy a.s.:

Dispatching: tel. +420-315 727 085, +420-315 713 041

Emergency telephone number in Czech Republic:

Toxicological information centre, Na Bojišti I, 128 08 Praha 2,

Tel. 24 hours/day: +420-224 919 293, +420-224 915 402, Fax: +420-224 914 570

2. HAZARDS IDENTIFICATION

2.1. Classification of the mixture

2.1.1. Classification of the mixture in accordance with Directive 1999/45/EC

This product is not classified as dangerous.

2.2. Label elements

In accordance with EU and national laws labelling of the product is not required.

Synthos Kralupy a.s.

O. Wichterleho 810, 278 01 Kralupy n. Vltavou,

tel. +420 315 711 111, fax +420 315 723 566

www.synthosgroup.com

synthos
chemical innovations

2.3. Other hazards

The product contains no substances that meet the criteria for PBT or vPvB in accordance with Annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

The product contains no dangerous components which listing under this section is required in accordance with the Annex II to REACH Regulation.

4. FIRST AID MEASURES

4.1. Description of first aid measures

4.1.1. Inhalation

In case inhalation of vapours released by/from melted product causes nausea go out to fresh air. Rinse throat with water. Consult a physician in case symptoms persist.

4.1.2. Skin contact

Wash skin with plenty of water and soap. Susceptible persons may suffer from skin irritation. Consult a physician in case symptoms persist.

In case of contact of melted product with skin, immediately cool down the melted plastic and surrounding skin with plenty of water. Do not attempt to remove material which has adhered to skin until it has been cooled down to ambient temperature. In case of thermal burns consult a physician.

4.1.3. Eye contact

Thoroughly rinse eyes with plenty of water for at least 15 minutes while lifting the eyelids. In case of contact of melted product with eyes, immediately cool down the melted plastic and continue rinsing eyes for at least 15 minutes. Check for and remove (if any and if possible) contact lenses (unless they adhered to eyes). Provide medical help.

4.1.4. Ingestion/swallow

Consult a physician

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

Upon direct contact with the product susceptible persons may suffer from skin/eye irritations.

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

None.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

5.1.1. Suitable extinguishing media

Water, heavy, medium and light foam, powder (A, B, C), CO₂.

5.1.2. Unsuitable extinguishing media

None.

5.2. Special hazards arising from the mixture

The combustion produces carbon oxides, hydrocarbons mixture and black.

5.3. Advice for fire-fighters

Evacuate personnel from the endangered area immediately

Fire-fighters should wear full bunker gear and SCBA approved by relevant authorities.

Extinguished rubber should be soaked thoroughly with water to cool it down and prevent re-ignition.

Use self-contained breathing apparatus + complete protective clothing.

5.4. Other information

Dispose of fire debris and contaminated extinguishing water in accordance with regulations in force. Collect contaminated extinguishing water separately, do not allow it to reach sewage or effluent systems.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Avoid contact with the product. Follow advice and instructions of emergency responders.

6.1.2. For emergency responders

Avoid contact with the product. Wear work clothing and personal protective equipment.

6.2. Environmental precautions

None.

Synthos Kralupy a.s.

O. Wichterleho 810, 278 01 Kralupy n. Vltavou,

tel. +420 315 711 111, fax +420 315 723 566

www.synthosgroup.com

6.3. Methods and material for containment and cleaning up

6.3.1. Methods and material for containment

Not applicable the product is a solid of low mobility.

6.3.2. Methods and material for cleaning up

Collect the product to a labelled container. Use gloves, and/or broom and shovel. Use or dispose of the material in accordance with regulations in force.

6.4. Reference to other sections

Not applicable.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Observe basic regulations on occupational health, safety and hygiene as well as operating instructions at the workplace.

Do not eat and drink when handling the product.

Wear proper working clothing. If necessary, use personal protection equipment.

Avoid direct contact with the product.

Avoid contact with eyes.

Ensure proper ventilation of the workplace.

Do not permit dust to accumulate.

7.2. Conditions for safe storage, including any incompatibilities

The product should be stored in ventilated rooms at temperature not exceeding 30°C.

Protect against humidity, light and weather conditions.

Keep away from the sources of heat and ignition.

Do not store together with organic solvents.

In case of wooden 1.0 t pallets storage of the product in 2 (two) or more layers (stacking) is not recommended.

For conditions to avoid and incompatible materials see Section 10 of this Safety Data Sheet.

7.3. Specific end use(s)

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limits

None have been established.

8.1.2. DN(M)EL levels

8.1.2.1. DN(M)EL levels – workers

Data not available.

8.1.2.2. DN(M)EL levels – general population

Data not available.

8.1.3. PNEC levels

Data not available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide ventilation of the workplace.

8.2.2. Individual protection measures, such as personal protective equipment

8.2.2.1. Eye/face protection

Workers performing activities for which exposure to particles that are capable of causing mechanical injury to the eye have to wear protective goggles.

8.2.2.2. Skin protection

Hand protection

Wear protective gloves. Material: leather, PVC: thickness ca. 0,3 mm; penetration time: >480 min. Gloves of other material can be used as well provided they deliver the same level of protection. Damaged gloves have to be replaced with new ones.

Other

Wear work clothing and shoes.

8.2.2.3. Respiratory protection

In case of insufficient ventilation and when dusts are generated wear mask conforming to EN 143 equipped with a P1 type filter.

Synthos Kralupy a.s.

O. Wichterleho 810, 278 01 Kralupy n. Vltavou,

tel. +420 315 711 111, fax +420 315 723 566

www.synthosgroup.com

8.2.2.4. Thermal hazards

The product creates no thermal hazards.

8.2.3. Environmental exposure controls

Avoid release to the environment. Do not discharge into drains.

Emissions from vents and processing equipment have to be controlled in order to determine whether they are in compliance with in force regulations on environmental protection. Basing on results of such controls the need for implementation of relevant environmental risk management measures can be determined.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

a) Appearance	Yellowish to dark brown solid amorphous product pressed to blocks. Block Dimension c. 700x 350x 180mm.
b) Odour	characteristic
c) Odour threshold	data not available
d) pH	not applicable
e) Melting point/freezing point	data not available
f) Initial boiling point and boiling range	not applicable – decomposes
g) Flash point (°C)	310
h) Evaporation rate	not applicable
i) Flammability (solid, gas)	data not available
j) Upper/lower flammability or explosive limits	not applicable
k) Vapour pressure	not applicable
l) Vapour density	not applicable
m) Relative density	ca. 1 g/cm ³
n) Solubility	insoluble in water
o) Partition coefficient: n-octanol/water	not applicable
p) Auto-ignition temperature	not applicable
q) Decomposition temperature	ca. 220°C
r) Viscosity	not applicable
s) Explosive properties	not applicable
t) Oxidising properties	not applicable
9.2. Other information	
u) Heat of combustion	ca. 45 MJ/kg
v) Polymerization heat	not applicable

10. STABILITY AND REACTIVITY

10.1. Reactivity

See Section 10.3 of this Safety Data Sheet.

10.2. Chemical stability

The product is stable under given herein conditions of use and storage.

10.3. Possibility of hazardous reactions

Occurrence of hazardous reactions is unlikely.

10.4. Conditions to avoid

High temperature, direct sunlight.

10.5. Incompatible materials

Organic solvents, strong oxidizers.

10.6. Hazardous decomposition products

Thermal decomposition of the product starts at ca. 220°C and is accompanied by formation and subsequent release of styrene, butadiene and their derivatives.

11. TOXICOLOGICAL INFORMATION

No data on toxicological properties of the product as such is available. Hazards which the product creates to the human health and life have been assessed in accordance with rules applicable for mixtures (see also Section 2 of this Safety Data Sheet).

11.1. Information on toxicological effects

11.1.1. Acute toxicity

Based on available data, the classification criteria are not met.

11.1.2. Skin corrosion/irritation

Based on available data, the classification criteria are not met.

11.1.3. Serious eye damage/irritation

Based on available data, the classification criteria are not met.

11.1.4. Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

11.1.5. Germ cell mutagenicity

Based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC, and relevant information for the substances listed under Section 3 (if any) the product is not classified as mutagenic.

11.1.6. Carcinogenicity

Based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC, and relevant information for the substances listed under Section 3 (if any) the product is not classified as carcinogenic.

11.1.7. Reproductive toxicity

Based on the conventional method outlined in Article 6(1)(a) of Directive 1999/45/EC, and relevant information for the substances listed under Section 3 (if any) the product is not classified as toxic to reproduction.

11.1.8. STOT-single exposure

Based on available data, the classification criteria are not met.

11.1.9. STOT-repeated exposure

Based on available data, the classification criteria are not met.

11.1.10. Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on likely routes of exposure

Dermal, inhalation.

11.3. Symptoms related to the physical, chemical and toxicological characteristics

This product is not classified as dangerous.

11.4. Delayed and immediate effects as well as chronic effects from short and long-term exposure

This product is not classified as dangerous. Upon direct contact with the product susceptible persons may suffer from skin/eye irritations.

12. ECOLOGICAL INFORMATION

No data on ecotoxicological properties of the product as such is available. Hazards which the product creates to the environment have been assessed in accordance with rules applicable for mixtures (see also Section 2 of this Safety Data Sheet).

12.1. Toxicity

The product is not classified as dangerous to the environment.

12.2. Persistence and degradability

The main component of the product (polymer) does not undergo biodegradation, oxidation or hydrolysis at noticeable rate.

12.3. Bioaccumulative potential

Based on chemical structure it is expected that the main component of the product (polymer) will not undergo bioaccumulation.

12.4. Mobility in soil

Data not available

12.5. Results of PBT and vPvB assessment

The product contains no substances which have been identified as PBT/vPvB.

12.6. Other adverse effects

Data not available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Primary, product wastes should be recovered. Wastes, which could not be recovered should be biologically, chemically or physically transformed or stored on landfill.

Landfilling should be performed only for those wastes, destruction of which is technically impossible or ecologically or economically unjustified.

Recovery or destruction of product wastes has to be performed in accordance with regulations in force, in special assigned facility and/or equipment meeting the appropriate requirements.

Waste code: the product itself: 07 02 13 or 07 02 99.

13.2. Waste packagings

Bales of the product are wrapped with a polyethylene film and placed on flat or box-pallets.

The film is the unit packaging and an integral part of the product.

Returnable packaging may be reused after decontamination.

Disposable packaging has to be disposed of according to existing national, international and/or local disposal regulations.

Example waste code: used containers, rigorously scraped out and containing dried residues of the supplied product:

15 01 02 plastic packaging.

15 01 04 metal packaging.

"Rigorously scraped out" means removing the maximum amount of product from the container by physical or mechanical means (draining or scraping) to leave a residue or contamination that cannot be removed by such means.

These codes have been assigned based on the actual composition of the product both as supplied and as dried residues. If mixed with other wastes, the waste codes quoted may not be applicable.

14. TRANSPORT INFORMATION

Transport and packaging of the product are not subject to regulations on transport of hazardous goods (RID/ADR).

Transport the product using covered means of transport.

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the mixture

REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (including any amendments/adaptations to technical progress).

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (including any amendments/adaptations to technical progress).

DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives (including any amendments/adaptations to technical progress).

15.2. Chemical safety assessment

The supplier has not carried out chemical safety assessment for the mixture. In accordance with provisions of REACH regulation carrying out of chemical safety assessment for this product is not required.

15.3. Remark

The user's attention is drawn to possible existence of National, International and local regulations governing the product.

16. OTHER INFORMATION

16.1. Revised sections

Not applicable – new version.

16.2. List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements given under Sections 2 to 15 and (if applicable) full text of any statements which are not written out in full under the aforementioned Sections

Not applicable.



This document is of an informative character. The information given herein is based on the present state of our knowledge and experience. It makes neither product properties nor qualitative parameters guarantee and cannot be used as a basis of any claims. The information provided cannot be used for any mixtures with any other substances. Product should be transported, stored and used in accordance with valid regulations and good occupational hygiene practice.

Making use of the information as well as product application is beyond the producer control and determination of the safe conditions of use is the sole responsibility of a customer.