

Material Safety Data Sheet

TERVAKOSKI FILM KXS

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Identification /Trade name: Biaxial oriented polypropylene film / TERVAKOSKI FILM
Type: KXS
Product characteristic : mixture
CAS number: none
EC registration number : none
REACH Registration Number: It is not subject to registration according to the Regulation of the EP and Council (EC) No.1907/2006 (Section I, Article 2, Paragraph 9)

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

1.2.1 Recommended use: Packaging material. Packaging of capacitors.

1.3 Details of the supplier of the safety data sheet

Supplier: Terichem Tervakoski. a.s.
Štúrova 101
059 21 Svit
Slovak Republic
Phone: +421 52 715 3195
Fax: +421 52 715 3520
E mail: info@sk.tervakoskifilm.com

1.4 Emergency telephone number

Terichem Tervakoski, a.s., Štúrová 101, 059 21 Svit, Slovak Republic
Company dispatching 2(24 hours): Tel. +421 52 715 2441

Emergency Information Services / Official Advisory Body

National Toxicological Center (NTIC), Limbova 2645/5, 831 01 Bratislava, phone: +421 2 5477 4166
(24-hour consultation service for acute intoxications)

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2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Biaxially oriented polypropylene film TERVAKOSKI is not classified according to the Regulation of the Regulation of the EP and EC Council No.1272/2008 as a hazardous substance.

Danger to public health

Biaxially oriented polypropylene film TERVAKOSKI under normal conditions of use has no acute or chronic adverse effects on human health.

Danger to environment

From the environmental point of view, BOPP film TERVAKOSKI (or its components), remains unchanged in water and soil. Based on the available data on this product, no dangerous properties of the product for the environment are known. The product is biologically inert.

2.2 Label elements

Hazard classification:

Symbol of danger:

H - statements: not applicable

P - statements: : 210, 260

P210 – Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P260 – Do not breathe dust/fume/gas/mist/vapours/spray.

2.3 Other hazards

Flammability - Polymer film may burn when ignited (ignition initiated). During combustion, the polymer will melt and may form droplets that could promote fire.

During combustion, toxic gases are generated (see section 5 "Fire-fighting measures").

Flammable / toxic gases will be generated upon decomposition (see Section 10 "Stability and Reactivity").

Electrostatic charge - The product can collect an electrostatic charge during rewinding and friction. Static discharge in the presence of volatile or flammable substances creates a potential risk of fire or explosion. **Results of PBT and**

vPvB assessment

PBT: Not applicable VPvB:

Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Chemical characterization: Mixture

Description: Transparent film. The basic component polypropylene (polyolefin)

Hazardous substances: no

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4. FIRST - AID MEASURES

4.1 Description of first aid measures

General instructions:

No special measures are required.

Inhalation: Due to the physical form of the product, inhalation and / or ingestion are unlikely (possible) in normal use. First aid is normally not required. In case of excessive inhalation of fumes (in case of fire), move the affected person to fresh air. Call for medical help. If necessary give artificial respiration.

Skin contact: First aid is normally not required. In case of injury due to contact of the skin with molten film, rinse the affected area immediately with plenty of cold running water. Do not pull the product out of the skin. Cover the injured area with a clean cotton canvas or gauze, and seek medical help promptly.

Eye contact: First aid is normally not required.

4.2 Most important symptoms and effects, both acute and delayed

No other relevant information is available.

4.3 Indication of any immediate medical attention and special treatment

No other relevant information is available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Foam, powder, large water spray shower.

Extinguishing media which can not be used for safety reasons

Pressurized water stream.

5.2. Special hazards arising from the substance or mixture

During combustion a dense smoke develops. Dangerous carbon oxides may occur (CO and CO₂).

5.3 Advice for firefighters

Protective equipment:

Wear self-contained breathing apparatus. Wear full protective clothing.

Additional information

In case of a large fire protect people, storages and all other things near the fire by using a water curtain.

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6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.

Collect the rest of the film from the floor to avoid possible slipping of the staff.

6.2 Environmental precautions: Not defined

6.3 Methods and material for containment and cleaning up:

Mechanically collect and place in suitable containers (sacks) or clean containers. Depending on the degree of its pollution, material may be recycled or disposed of in accordance with the applicable waste legislation.

6.4 Reference to other sections

For information on safe handling see Chapter 7.

For information on personal protective equipment, see Chapter 8. See chapter 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure measures against electrostatic discharge (earthing of equipment, room ventilation) - the film accumulates a charge that may cause electric sparks (source of ignition). Obey all fire precautions (prohibition of open fire, removal of possible sources of ignition, no smoking).

Due to thermal sealing of the film, low molecular weight hydrocarbon mixtures and their oxidation products can be formed at recommended temperatures - ensure adequate ventilation for such process conditions. When handling bobbins, adhere the principles of safe handling of loads.

7.2 Storage

Store away from sources of ignition. Use with adequate ventilation.

Do not handle, or store near open flame, heat sources or ignition. Store in a cool, dry place away from direct heat or direct sunlight.

7.3 Specific end use(s)

Not listed. If you require a specific determination, please contact your supplier.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with limit values monitored at the workplace:

The product does not contain any relevant quantities of substances affecting the workplace, whose limits Values would need to be checked.

8.2 Exposure controls: It is not required

Personal protective equipment:

General protective and hygienic measures:

Observe common safety precautions for handling chemicals.
Avoid contact of the melt with the skin. Do not eat, do not drink, do not smoke at work.

Respiratory protection: If the rooms are sufficiently ventilated, they are not required

Hand protection: It is not required. If it is possible to contact the melt, it is recommended to use heat resistant gloves.

Eye protection: It is not required

Body protection: Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form:	solid, film
Color:	colorless, transparent
Odor:	None, or specific for the product
Value:	not applicable
Melting point:	cca. 165 °C
Flash point	> 350 °C
Ignition temperature:	> 350 °C
Minimum initiation ignition energy:	0,08 J
Burning heat	45 MJ/kg

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Danger of explosion:	Product is not explosive
Vapor pressure:	not applicable kPa
Density: (23 °C)	ca. 0,91 g/cm ³ DIN 53479
Viscosity:	not applicable
Solubility in water:	insoluble g/l
Hydroscopic:	Material is not
hydroscopic. Partition coefficient (n-octanol/ water)	not determined

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid

The product itself is stable at normal temperature without chemical reactivity. Avoid temperatures above 300 °C, a source of ignition, strong oxidizing agents.

10.2 Hazardous decomposition products

At high temperatures in the presence of air or strong oxidizing agents, decomposition occurs to produce CO, CO₂ and H₂O.

11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity effects

According to current scientific knowledge, it is not considered to be hazardous to humans and does not have an adverse effect on human health. Not considered as dangerous according to EC Directive No. 1272/2008 and EC Regulation no. 605/2014. Longer breathing of its decomposition products may cause headache or irritation of the respiratory tract.

11.2. Sensibility

It has no sensitizing effects.

11.3. Effects of CMR (Carcinogenicity, Mutagenicity, and Reproductive Toxicity)

It has no proven CMR effects.

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12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

The product is not considered to be hazardous to the environment.

12.2. Persistence and degradability

In the environment, it is a foreign substance with a very slow disintegration. Decomposes due to UV radiation. It is insoluble in water.

13. DISPOSAL CONSIDERATION

13.1. Recommended way of disposing of the substance

Ensure mechanical removal and transport, either for further processing, recycling or landfilling. Proper combustion does not require a special smoke chimney. The use should be in accordance with local waste legislation.

13.2. Recommended way of recovering waste

Material recovery by recycling R3, energy recovery R1, - use as fuel.

13.3. Waste legislation

European Union:

European waste catalog and hazardous waste list (EC)

Directive 2008/98 / EC of the European Parliament and of the Council on waste.

The waste codes of the components of this product are: 07 02 13

The user must be aware that the conditions of use may affect the waste classification after use. Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor.

15 01 01 paper

15 01 02 plast

15 01 03 wood

Care should in any case be taken to ensure compliance with EC, national and local regulations.

14. TRANSPORT INFORMATION

14.1 Transport hazard classification

This product is not classified according to EU directives as hazardous. From transport point of view there is no limitation.

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15. REGULATORY INFORMATION

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

- Regulation of the European Parliament and of the Council (EC) No 1907/2006 (REACH)
- Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the (REACH)
- Regulation of the European Parliament and of the Council (EC) No 1272/2008 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
- European Parliament and Council directive 94/62/EC of 20 December 1994 on packing and packaging waste
- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives
- Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste
- The law of the National Council Slovak Republic No 364/2004 on Waters (Water law)
- The law of the National Council Slovak Republic No 17/1992 on the Environment protection
- The law of the National Council Slovak Republic No 478/2002 on the Air protection
- The law of the National Council Slovak Republic No 67/2010 on the Conditions for placing chemical substances and mixtures on the market (Chemical law)

15.2 Chemical safety assessment

Not known

16. OTHER INFORMATION' EN

Recommendations regarding training

It is recommended to provide minimum occupational hazard training to employees who will handle this product, in order to facilitate the understanding and interpretation of this safety data register as well as the data on the product labels.

Main literature

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

Legend to abbreviations and acronyms used in the safety data sheet

AC	- alternating current
DC	- direct current
HEV	- hybro electric vehicle
EV	- electric vehicle
CMR	- carcinogenicity, mutagenicity, reproductive toxicity
EU	- European Union

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PBT - persistent, bioaccumulative and toxic
vPvB - very persistent and very bioaccumulative
ADR - European agreement on the international transport of dangerous goods by road
RID - agreement on the transport of dangerous goods by rail
IMDG - international maritime transport of dangerous goods
ADN - European agreement on the international inland water carriage of dangerous goods
ICAO - international organization for civil aviation
IATA - international air carriers association
DGR - dangerous goods
REACH - registration, assessment, authorization and restriction of chemical substances
MARPOL - European Union international convention for the prevention of pollution from ships
ECHA - European Chemicals Agency

We took maximal care to ensure that information in this document relating to the health, safety and the environment were accurate at the date of issue. This information correspond to the current state of knowledge and experience and do not guarantee specific properties of product. Data and information are valid if the product is used for the purpose for which it was sold. The user is required to use this product safely and to comply with all applicable laws and regulations. User is responsible for ensuring that by use of the product will respect safety precautions. Vendor assumes no responsibility for damage or injury, if the product will be use for other purposes than approved.

This document is not made for the purpose of quality certificate.