



MATERIAL DATA SHEET



Prepared according to the Decree of European Council no. 1907/2006 from 18.12.2006 regarding registering, evaluation, certification and authorizations in range of chemicals (REACH), creation of European Chemicals Agency, changing Directive 1999/45/EC and cancelling decree of Council no. 793/93 and decree of Commission no.1488/94, as well as directives 76/769/EC, 91/155/EC, 93/67/EC, 93/105/EC and 2000/21/EC.

Date of issue: 03. 01. 2010

Date of revision: 30. 05. 2014

Version: 1

SECTION 1 IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier: **POLYKAR TERMOTMEL ALU**

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

Two-component polyester putty with heat resistance after curing to 220 °C, designed for surface treatment before powder coating.

1.3. Details of the supplier of the safety data sheet:

Manufacturer/Distributor

BKP GROUP, a. s.

1. května 333

687 34 Uherský Brod 3 – Těšov

CZECH REPUBLIC

Tel.: + 420 572 610 061

Fax: +420 572 610 070

E-mail: obchod@bkp.cz

1.3.1. Responsible person; E-mail:

jozefh@bkp.cz

1.4. Emergency telephone number:

+420 224 919 293, +420 224 915 402

Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha 2

SECTION 2 IDENTIFICATION OF THREATS

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Acute Tox. 4

Eye Irrit. 2

Skin Irrit. 2



WARNING!

H-phrases:

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H332 – Harmful if inhaled.

P-phrases:

P101 – If medical advice is needed, have product container or label at hand

P102 – Keep out of reach of children

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 – Use only outdoors or in a well-ventilated area.

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



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2.2. Label elements



WARNING!

H-phrases:

H315 – Causes skin irritation.

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P101 – If medical advice is needed, have product container or label at hand

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P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Contain: styrene

EU limit value for this product (IIB(b)) 250 g/l (2010).

VOC=61 g/l

2004/42/WE IIB(b) (250)61

2.3. Information concerning particular hazards for human and environment:

Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, myasthenia, drowsiness and in extreme cases loss of consciousness.

Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.




Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.

Chronic exposure:

In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

SECTION 3 COMPOSITION/INFORMATION OF INGREDIENTS

3.1. Mixture:

Description	styrene	talc	aluminium
Concentration (%)	<15	<60	<2
CAS No.	100-42-5	14807-96-6	7429-90-5
EU No.	202-851-5	238-877-9	231-072-3
Registration No.	01-2119457861-32-xxxx	-	-
Symbol	 		
H phrases	Flam. Liq. 3 H226 Acute Tox. 4 (*)H332		Water-react. 2 H261 Flam.Sol. 3 H228



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	Eye Irrit. 2 H319		
	Skin Irrit. 2 H315		
Signal word	Warning	-	Danger
PBT/vPvB	no	no	no

Full meaning of phrases and symbols are in section 16.

SECTION 4 FIRST AID MEASURES

4.1. Description of first aid measures:

Take normal precautionary measures applied during the handling of chemicals. In case of any symptoms, seek medical advice.

IN CASE OF INGESTION:

Measures:

- If swallowed, do not induce vomiting (risk of aspiration).
- Obtain immediate medical help.

IN CASE OF INHALATION:

Measures:

- Remove the affected person to fresh air, keep calm, cover with a blanket.
- In case of shortness of breath, give oxygen.
- If breathing has stopped, administer artificial respiration and obtain medical help.

IN CASE OF SKIN CONTACT:

Measures:

- Immediately flush with plenty of water.
- Take off all contaminated clothing.
- Wash skin with plenty of water and soap.
- In case of symptoms, obtain medical attention and show him the label!

IN CASE OF EYE CONTACT:

Measures:

- Remove contact lenses.
- Flush immediately with plenty of water for 15 minutes, holding the eyelids wide open.
- Consult an ophthalmologist.

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

Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, myasthenia, drowsiness and in extreme cases loss of consciousness.

Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.

Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.

Chronic exposure: In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

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

No special antidote, apply symptomatic treatment.

SECTION 5 FIRE-FIGHTING MEASURES



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5.1. Extinguishing media:

5.1.1. Suitable extinguishing media:

Foam, carbon dioxide or dry chemical.

5.1.2. Unsuitable extinguishing media:

Strong water-jet.

5.2. Special hazards arising from the substance or mixture:

In case of combustion, carbon oxide and toxic fumes are formed.

5.3. Advice for fire-fighters:

Wear full protective clothing (gas-tight and antistatic) and self-contained breathing apparatus. Cool the fire affected containers with water spray. Prevent penetration into ground and surface water. Prevent penetration of the fire extinguishing media into ground and surface water. Collect fire extinguishing media separately, do not discharge into sewage system.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Keep unprotected people away, allow only well trained experts wearing suitable protective clothing to abide in the field of accident.

6.1.2. For emergency responders:

Remove all ignition sources, flames. Protect sewage outlets. Disperse vapours with water spray. Stop leakage – close the source of the leakage, seal damaged container and place in another container. Ensure adequate ventilation. Wear protective clothing and gloves. Do not inhale vapours.

6.2. Environmental precautions:

Dispose of spillage and waste (product/packaging) in accordance with all applicable environmental laws. Do not allow to enter sewers/soil/surface or ground water. Notify the respective authorities in accordance with local law in the case of environmental pollution immediately.

6.3. Methods and material for containment and cleaning up:

Absorb the spilled product with an inert substance (e.g.: sand or diatomaceous earth) and transfer into a sealed container, and send to an authorized waste disposal company. During disposal wear suitable personal protective equipment.

6.4. Reference to other sections:

For further and detailed information see section 8 and 13.

SECTION 7 HANDLING AND STORAGE

7.1. Precautions for safe handling:

Observe conventional hygiene precautions. Avoid contact with skin and eyes. Do not inhale vapours. Do not eat, drink or smoke during the usage.

Technical measures: Use only in well-ventilated places with exhaust ventilation. Tools, equipments and containers must be sealed tightly.

Precautions against fire and explosion: Keep away from heat and ignition sources.

7.2. Conditions for safe storage, including any incompatibilities:



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Technical measures and storage condition: Keep in original, tightly closed and labelled container. The place of storage has to be properly ventilated and cleanable. Store in a cool and dry place. Protect against sunlight. Store below 20°C. Do not store with self-igniting substances and peroxides. Store in original, properly labelled containers, which are tightly sealed. Do not smoke, eat, use open fire and sparking tools in the place of the storage. Keep away from the reach of children. Follow all instructions on the label. Incompatible materials: strong oxidizing agents. Packaging material: original container.

7.3. Specific end use(s):

No specific instructions available.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters:

Description	PEL	NPK-P	PELr	PELc
Styrene	100 mg/m ³	400 mg/m ³		
Talc			2 mg/m ³	2,5 mg/m ³
Dust of polyester resins				100 mg/m ³

8.2. Exposure controls:

In case of a hazardous material with no controlled concentration limit it is the employer's duty to keep concentration levels down to a minimum achievable by existing scientific and technological means, where the hazardous substance poses no harm to workers.

8.2.1 Appropriate engineering controls

In pursuance of work is proper foresight needed to avoid spilling onto clothes and floors and to avoid contact with eyes and skin. The suction of the vapours at the source(s) of emission and general exhaust ventilation is required. The exhaust vents should be placed in the upper part of the room and at the floor level. Keep away from heat and ignition sources.

8.2.2. Individual protection measures, such as personal protective equipment:

1. Eye/face protection: When working with the product, wear safety glasses with side protection (like goggles) to protect against splashes or a full face shield for protection against vapours and aerosols

2. Skin protection:

a) Hand protection: Wear plastic gloves resistant to organic solvents. Discard contaminated gloves. Wash hands thoroughly after the work hours.

b) Other: Wear suitable protective clothing made of dense fabric. To prevent skin drying, use suitable protective cream. Separate private clothes from work clothes. Contaminated clothes cannot be reused without prior cleaning (washing).

3. Respiratory protection: In case of insufficient ventilation, wear suitable respiratory protection - protective filter masks adapted to activities associated with processing of the product.

4. Thermal hazard: None known.

8.2.3. Environmental exposure controls:

No specific prescription. The requirements detailed in Section 8 assume skilled work under normal conditions and usage of the product for appropriate aims. If conditions differ from normal or work is carried out under extreme conditions an expert's advice should be sought out before deciding upon further protective measures.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES:

9.1. Information on basic physical and chemical properties

Physical condition/form:	Liquid of high viscosity
Colour:	Metallic
Odour:	Typical of solvents (styrene)



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Flash point:	200 °C
Auto-ignition temperature:	420 °C
Melting point:	No data
Vapours pressure:	5 hPa
Solubility in water and other solvents:	Very weak
Solubility in organic solvents:	Soluble in organic solvents
Specific gravity:	1,70-1,80 g/cm ³
pH:	No data
Explosive properties	
Upper explosion limit:	5,2 % vol.
Lower explosion limit:	1,1 % vol.
Oxidizing properties:	No data
Distribution ratio 1-n-octanol/water:	No data available
9.2. Other information:	TOC: 0,12 kg/kg of product Viscosity: 1800 mPa.s Solid content (% vol): 73,14

SECTION 10 STABILITY AND REACTIVITY

10.1. Reactivity: None known.

10.2. Chemical stability: At normal temperature: stabile at general conditions of work.

10.3. Possibility of hazardous reactions: None known.

10.4. Conditions to avoid: High temperature, fire.

10.5. Incompatible materials: Strong acids, oxidizing agents, peroxides, aluminum chloride.

10.6. Hazardous decomposition products: In case of high temperature or fire, carbon oxides and toxic smoke may evolve.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity: Harmful by inhalation and in contact with skin.

Irritation: None known.

Corrosivity: None known.

Sensitisation: None known.

Repeated dose toxicity: Repeated exposure may cause skin dryness or cracking.

Carcinogenicity: None known.

Mutagenicity: None known.

Reproduction toxicity: None known.

11.1.1. For substances subject to registration, brief summaries of the information derived from the test conducted: No data available.

11.1.2. Relevant toxicological properties of the hazardous substances: Information on toxicological effects:

Styrene (CAS: 100-42-5)

LD₅₀ oral, rat 5000 mg/kg



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LD₅₀ dermal, rat or rabbit -
LD₅₀ inhal, rat, for aerosols -
LC₅₀ inhal, rat, for vapours 2770 ppm/4 hod.

11.1.3. Information on likely routes of exposure: Ingestion, inhalation, skin and eye contact.

11.1.4. Symptoms related to the physical, chemical and toxicological characteristics:

Inhalation: in mild cases it causes cough, irritation of the mouth and throat, sometimes it causes chest pain. In more acute cases it causes headache, vertigo, fatigue, maysthenia, drowsiness and in extreme cases loss of consciousness.

Eye contact: causes mechanical irritation, redness, pain and asthenopia. If the drops of the product get in the eyes, may cause impairment of sight and allergic reactions.

Skin contact: may cause irritation. In case of problematic skin, skin absorption may occur. In case of long term or repeated contact the skin drying and erythroderma may occur. Irritation and redness may occur.

Chronic exposure: In case of chronic inhalation of the vapour/dust of the product, chest pain, irritation of the mucous membranes, headache, vertigo, excitement or drowsiness, problems with the digestive system, exsiccation, cracking of the skin and allergy may occur.

11.1.5. Delayed and immediate effects as well as chronic effects from short and long-term exposure: Harmful by inhalation and in contact with skin. Repeated exposure may cause skin dryness or cracking.

11.1.6. Interactive effects: No data available.

11.1.7. Absence of specific data: No information.

11.1.8. Other information: No data available.

SECTION 12 ECOLOGICAL INFORMATION

12.1. Toxicity:

Aquatic toxicity:

Styrene (CAS: 100-42-5)

LC50- fish	LS50 aquatic invertebrates	EC50 algae	NOEC bacterium
4 - 10	4,7	4,9	72
mg/l/96h	mg/l/48h	mg/l/72h	mg/l/16h

Effect on activated sludge: at proper entering of small concentrations to biological sewage treatment plants no perturbations should be expected during the decomposition of the activated sludge.

12.2. Persistence and degradability:

Styrene (CAS: 100-42-5)

Biodegradation: 80%/20 d (in closed circumstances) – the product is readily biodegradable.

Bioaccumulation: log Pow: 2,96 (OECD 107) – bioaccumulation potential is not significant.

12.3. Bioaccumulation potential: No data available.

12.4. Mobility in soil: No data available.

12.5. Results of PBT and vPvB assessment: No data available.

12.6. Other adverse effects: No data

SECTION 13 DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods:

Disposal according to the local regulations.

13.1.1. Information regarding the disposal of the product:



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Do not dispose with communal wastes, do not pour into drainage system. Incinerate in specially adapted installations or deliver to authorized waste collector.

European Waste Catalogue code:

08 01 00 wastes from MFSU and removal of paint and varnish

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

* hazardous waste.

13.1.2. Information regarding the disposal of the packaging

Used packaging should be delivered to authorized collector who has due permission within the range of waste management and especially in dangerous waste management.

European Waste Catalogue code: For used packaging:

15 01 10* packaging containing residues of or contaminated by dangerous substances

* hazardous waste.

13.1.3. Physical/chemical properties that may affect waste treatment options shall be specified: None known.

13.1.4. Sewage disposal: None known.

13.1.5. Special precautions for any recommended waste treatment: No data available.

SECTION 14 TRANSPORT INFORMATION

Land transport (ADR/RID)

UN Number: -
UN proper shipping name: -
Transport hazard class(es): -
Label: -
Packing group: -
Environmental hazards: No.
Tunnel restriction code: -

Marine transport IMDG/IMO

UN Number: -
UN proper shipping name: -
Transport hazard class(es): -
Label: -
EmS code: -
Packing group: -
Environmental hazards: No.

Air transport IATA

UN Number: -
UN proper shipping name: -
Transport hazard class(es): -
Label: -
Packing group: -
Environmental hazards: No.

Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code: Not applicable.

SECTION 15 REGULATORY INFORMATION

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



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(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

* COMMISSION REGULATION (EC) No 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures

* DIRECTIVE 1999/45/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations

* 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

* COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

15.2. Chemical safety assessment: For the mixture was not made.

SECTION 16 OTHER INFORMATION

Information regarding the revision of the safety data sheet: Adjustment of the safety data sheet according to Regulation (EU) No. 453/2010.

Relevant H-Phrases (number and full text) of Section 2 and 3:

H226 – Flammable liquid and vapour.

H228 - Flammable solid.

H261 - In contact with water releases flammable gas.

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H332 – Harmful if inhaled.

Abbreviations of the hazard categories: Flam. Liq. – Flammable liquid; Acute Tox. – Acute toxicity; Eye Irrit. – Eye irritation; Skin Irrit. – Skin irritation

Training instructions: -

Recommended restrictions on use (non-statutory recommendations by supplier): -

Statement:

This safety data sheet had been prepared on the basis of information provided by the manufacturer. The information, data and recommendations contained herein are provided in good faith, obtained from reliable sources and believed to be true and accurate as of the date issued; however, no representation is made as to the comprehensiveness of the information. The MSDS shall be used only as a guide for handling the product; in the course of handling and using the product other considerations may arise or be required. Since the conditions or the handling, the storage and the disposal of this product are beyond the control of the manufacturer, the distributor or the preparer of this SDS, no warranty, expressed or implied, regarding the product described in this MSDS shall be created or inferred by any statement in this SDS. No responsibility is assumed regarding the accuracy, completeness or suitability of all or any of the information contained herein or the results to be obtained from the use thereof at the time of use. In no way shall the manufacturer, the distributor or the preparer of the be liable for any claims, losses or damages of third parties, personal injury, property damage, lost profits or any special, direct, indirect, incidental, consequential or exemplary damages resulting from the use of or reliance upon such information. Users are cautioned to determine the appropriateness and applicability of the above information to their particular circumstances and purposes and



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assume all risk associated with the use of this product. It is the responsibility of the user to fully comply with local, national and international regulations concerning the use of this product.