

Trade Name: Brandenburger Liner

Company / Supplier: Brandenburger Liner GmbH & Co. KG, Taubensuhstrasse 6, D- 76829 Landau

Telephone: +49 (0)6341 5104-0, Date of issue: 18.05.2015 Replaces Data Sheet of: 29.06.2010

SECTION 3: Composition/information on ingredients**3.1 Substances**

n. ap.

3.2 Mixtures

Glass fibre impregnated with polyester/vinylester resin solution in styrene (resins in solution, not cured)

Dangerous Ingredients:

CAS - No.	Index - No.	EC - No.	Material	m% - range	Symbol	H - phrases
100-42-5	601-026-00-0	202-851-5	Styrene	10 - 30%	GHS02 GHS07 GHS08	H226 H332 H315 H319 H361d H372 (acoustic organ)
24650-42-8	n.av.	246-386-6	2,2-Dimethoxy-1,2-diphenylethan-1-one	0,1 - 0,25%	GHS09	H400 H410
162881-26-7	015-189-00-5	423-340-5	phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	0,1 - 1%	GHS07	H317 H413

Text of H- phrases: see section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****4.1.1 Inhalation:**

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
Consult a physician. Show this safety data sheet to the doctor in attendance.

4.1.2 Skin Contact:

Resins in solution: Wash off immediately with soap and plenty of water.
In the case of skin irritation or allergic reactions see a physician.

4.1.3 Eye Contact:

Resins in solution: Call a physician immediately.
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

4.1.4 Ingestion:

n.ap.

4.2 Most important symptoms and effects, both acute and delayed

Resin in in solution: Inhalation may provoke the following symptoms: headache nausea dizziness.
Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1 Extinguishing media****5.1.1 Suitable Extinguishing Media:**Use dry chemical, CO₂, water spray or "alcohol" foam.**5.1.2 Extinguishing Media to Avoid:**

High volume water jet.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon oxides

5.3 Advice for firefighters**5.3.1 Special Protective Equipment:**

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

5.3.2 Additional Information:

Polymerisation occurs when exposed to white light, ultraviolet light or heat.
In the event of fire, cool tanks with water spray. Collect contaminated fire extinguishing water separately.
This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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SECTION 6: Accidental release measures

- 6.1 **Personal precautions, protective equipment and emergency procedures**
 See chapter 8.2.2
 In order to avoid inhalation of sanding dust, all sanding must be done wearing adequate respirator.
- 6.2 **Environmental precautions**
 Do not contaminate water.
- 6.3 **Methods and material for containment and cleaning up**
 Use mechanical handling equipment.
 If recycling is not practicable, dispose of in compliance with local regulations.
- 6.4 **Reference to other sections**
 None.

SECTION 7: Handling and storage

- 7.1 **Precautions for safe handling**
- 7.1.1 **Precautions for Safe Handling:**
 When using, do not eat, drink or smoke. Take off all contaminated clothing immediately.
 Wash hands before breaks and at the end of workday.
- 7.1.2 **Precautions in Case of Fire and Explosion:**
 Keep away from sources of ignition - No smoking.
- 7.2 **Conditions for safe storage, including any incompatibilities**
- 7.2.1 **Storage Instructions:**
 Store in original container. Keep container tightly closed in a cool place.
 Keep in a dry place. Protect against light.
- 7.2.2 **Store away from:**
 Do not store together with oxidizing agents.
- 7.2.3 **Further Information on Storage Conditions:**
 Keep at temperatures between 5 and 30°C.
- 7.3 **Specific end use(s)**
 n.av.

SECTION 8: Exposure controls/personal protection

- 8.1 **Control parameters**

Material	Limit Value
Styrene	20 ppm 86 mg/m³
- 8.2 **Exposure controls**
- 8.2.1 **Appropriate engineering controls**
 Provide appropriate exhaust ventilation at machinery.
- 8.2.2 **Individual protection measures**
- 8.2.2a **Respiratory Protection:** In order to avoid inhalation of sanding dust, all sanding must be done wearing adequate respirator. Multi-purpose combination filter:
- 8.2.2b **Hand Protection:** Impervious butyl rubber gloves break through time > 6h
 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
- 8.2.2c **Eye Protection:** Tightly fitting safety goggles
- 8.2.2d **Skin Protection:** Lightweight protective clothing
- 8.2.2e **Further Information:** Observe wearing time limits:
- 8.2.3 **Environmental exposure controls:**
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SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

9.1.1	Form: Resins in solution viscous liquid	Colour: light yellow	Odour: characteristic
			Odour threshold: n.av.
9.1.2	pH-value, undiluted:	n.ap., pH-value, 1% aqueous solution: n.av.	
9.1.3	Boiling point / Boiling - range (°C):	146 (Styrene), Melting point / Melting range (°C): n.av.	
9.1.4	Flash point (°C):	34 (Styrene) product does not support combustion, closed cup	
9.1.5	Flammability (EEC A10/A13):	None.	
9.1.6	Ignition temperature (°C):	490 (Styrene)	
9.1.7	Autoflammability (EEC A16):	No.	
9.1.8	Oxidising properties:	No.	
9.1.9	Explosion hazard:	No.	
9.1.10	Explosion limits (Vol.%) lower:	n.av., upper: n.av.	
9.1.11	Vapour pressure: / Vapour density (Air = 1):	10 mbar (20°C) / 50 mbar (50°C) / n.av.	
9.1.12	Density (g/ml):	1,4	
9.1.13	Solubility (in Water):	immiscible	
9.1.14	Partition coefficient, n-Octanol / Water:	n.av.	
9.1.15	Viscosity:	n.av.	
9.1.16	Solvent content (m %):	10 - 30	
9.1.17	Thermal decomposition (°C):	n.av.	
9.1.18	Evaporation rate:	n.av.	
9.2	Other information	n.av.	

SECTION 10: Stability and reactivity

10.1	Reactivity	None.
10.2	Chemical stability	Stable under normal conditions.
10.3	Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4	Conditions to avoid	Keep away from heat.
10.5	Incompatible materials	Polymerisation occurs when exposed to white light, ultraviolet light strong oxidizing agents or heat. Polymerization is a highly exothermic reaction.
10.6	Hazardous decomposition products	No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****11.1.1 Substances****11.1.2 Mixtures**

Acute Toxicity:	
Inhalation:	Styrene: LC ₅₀ /inhalation/4h/rat = 10 - 20 mg / l
Ingestion:	Styrene: LD ₅₀ /oral/rat > 5000 mg / kg
Skin Contact:	n.av.
Irritation / corrosion (to skin / eye):	Causes skin irritation. Causes serious eye irritation.
Sensitisation:	May cause an allergic skin reaction.
Carcinogenicity:	n.av.
Mutagenicity:	n.av.
Teratogenicity:	Repr. 2
Narcotic Effects:	Inhalation of high vapour concentrations can cause CNS-depression and narcosis.

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11.1.3 – Practical Experience

11.1.12 n.av.

11.1.13 Practical Experience

Observations relevant for classification:

None.

Further Observations:

None.

Classification of the preparation has been done by calculation in accordance with EEC directives.

SECTION 12: Ecological information**12.1 Toxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

2,2-Dimethoxy-1,2-diphenylethan-1-one

Toxicity to fish LC₅₀ (96h): 6 mg / LToxicity to daphnia EC₅₀ (24h): 26 mg / L**12.2 Persistence and degradability**

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

n.av.

12.4 Mobility in soil

n.av.

12.5 Results of PBT and vPvB assessment

n.av.

12.6 Other adverse effects

12.6.1 COD-Value, mg/g: n.av.

12.6.2 BOD5-Value, mg/g: n.av.

12.6.3 AOX-Remarks: n.ap.

12.6.4 Significant Components: 2,2-Dimethoxy-1,2-diphenylethan-1-one

12.6.5 Other adverse effects: No.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

13.1.1 Recommendation: D 10

Waste - Code - No.:

The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.

In addition comply with the regional authorities.

13.2 Contaminated Packaging

13.2.1 Recommendation: Wash with suitable cleaner. Otherwise as described under Residues.

13.2.2 Safe Handling: As described under Residues.

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SECTION 14: Transport information

	ADR Not a dangerous substance as defined in the above regulations.	IMDG Not a dangerous substance as defined in the above regulations.	IATA Not a dangerous substance as defined in the above regulations.
14.1	UN number		
14.2	UN proper shipping name		
14.3	Transport hazard class(es)		
14.4	Packing group		
14.5	Environmental hazards		
14.6	Special precautions for user		
	Transport category: Classification Code: Hazard - No.: LQ:		Packing Instructions (Passenger) Packing Instructions (Cargo)
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		

SECTION 15: Regulatory information

- 15.1 **Safety, health and environmental regulations/legislation specific for the substance or mixture**
n.av.
- 15.2 **Chemical safety assessment :**
A chemical safety assessment has not been carried out.

SECTION 16: Other information**Text of R / H phrases mentioned in Section 3**

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H332: Harmful if inhaled.

H361d: Suspected of damaging the unborn child.

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H413: May cause long lasting harmful effects to aquatic life.

This datasheet has been compiled in accordance with EU regulation 453/2011.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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