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Safety data sheet

1. Substance/preparation and company identification

Trade name:

BKF S-Harz NV

Application of the substance/ the preparation:

Reaction resin

BEIL

Kunststoff-Produktions- und Handelsgesellschaft mbH

Lehmkuhlenweg 9

D- 31224 Peine

Telefon: +49 (0)5171/70 99-0 Telefax: +49 (0)5171/7099-29 E-Mail: service@beil-peine.de

Information in case of emergency:

Giftzentrale Göttingen Tel.: +49 (0)551/19240 Telefax: +49 (0)551/3831881

2. Hazards identification

Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xi; Irritant

R37/38: Irritating to respiratory system and skin.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

F; Highly flammable R11: Highly flammable.

Information concerning particular hazards for human and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



Xi Irritant F Highly flammable

Hazard-determining components of labelling:

methyl methacrylate

Risk phrases:

11 Highly flammable.

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37/38 Irritating to respiratory system and skin.

43 May cause sensitisation by skin contact.

Safety phrases:

3/7 Keep container tightly closed in a cool place.

9 Keep container in a well-ventilated place.

16 Keep away from sources of ignition - No smoking.

24 Avoid contact with skin.

37/39 Wear suitable gloves and eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous Components

Components		
CAS: 80-62-6	methyl methacrylate	50-100 %
EINECS: 201-297-1	Xi R37/38; Xi R43; F R11	
CAS: 38668-48-3	1,1'-(p-tolylimino)dipropan-2-ol	2,5-10 %
EINECS: 254-075-1	T R25 R52/53	
CAS: 38668-48-3	1,1'-(p-tolylimino)dipropan-2-ol	0.5-2.5%
EINECS: 254-075-1	T R25	
	R52/53	
CAS: 99-97-8	N,N-dimethyl-p-toluidine	< 0.5%
EINECS: 202-805-4	T R23/24/25	
	R33-52/53	

Additional information: For the wording of the listed risk phrases refer to section 16.

4. FIRST AID MESSURES

Description of first aid measures

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation. **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

After eye contact: If symptoms persist consult doctor.

After swallowing: If symptoms persist consult doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Foam

Sand

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CO2, powder or water spray. Fight larger fire with alcohol resistant foam.

CO2, sand, extinguishing powder. Do not use water. For safety reasons unsuitable extinguishing agents:

Water

Water with full jet

Special hazards arising from the substance or mixture

Exothermic polymerization.

In case of fire, the following can be released:

Hydrocarbons

Carbon monoxide and carbon dioxide

Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device. Additional information Cool endangered receptacles with water spray.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about fire - and explosion protection:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in cool, dry conditions in well sealed receptacles.

Do not allow to enter sewers/ surface or ground water.

Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Store receptacle in a well ventilated area.

Keep container tightly sealed.

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Store in cool, dry conditions in well sealed receptacles.

Maximum storage temperature: 25°C

Specific end use(s) No further relevant information available.

8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7. Control parameters

Ingredients with limit values that require monitoring at the workplace:	
80-62-6 methyl methacrylate	
WEL	Short-term value: 416 mg/m³, 100 ppm Long-term value: 208 mg/m³, 50 ppm

· DNELs				
80-62-6 methyl methacrylate				
Dermal	DNEL Dermal	17 mg/kg/d (-)		
Inhalative	DNEL Inhalation	208 mg/m³ (-)		

Additional information: The lists valid during the making were used as basis

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

Respiratory protection:

Self-contained respiratory protective device.

Filter AX

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves Nitrile rubber, NBR

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

Body protection: Protective work clothing

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9. Physical and chemical properties

Information on basic physical and chemical properties Gerneral Information

Appearance:

Form: Fluid
Colour: Coulorless
Odour: Characteristic
Odour Threshold: no data available
pH: no data available

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 100°C Flash point: 10°C

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 430°C

Decomposition temperature: Not determined.

Self-igniting: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of

explosive air/vapour mixtures are possible.

Explosion limits:

Lower: 2.1 Vol %
Upper: 12.5 Vol %
Vapour pressure at 20°C: 38.7 hPa
Density at 20°C: 0.95 g/cm³
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.

Solubility in / Miscibility with

water: Not miscible or difficult to mix.

Segregation coefficient

(n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined. Kinematic at 20°C: 71 s (ISO 6 mm)

Solvent content:

Organic solvents: 0.0 %

Other information No further relevant information available.

10. Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: Keep away from heat and direct sunlight.

Possibility of hazardous reactions Exothermic polymerization.

Conditions to avoid No further relevant information available.

Incompatible materials: Reacts with peroxides and other radical forming substances.

Hazardous decomposition products:

Hydrocarbons

Carbon monoxide and carbon dioxide

Additional information:

Do not allow product to reach sewage system or any water course.

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

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Do not allow to enter sewers/ surface or ground water.

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11. Toxicological information

Information on toxicological effects

Acute toxicity:

LD/LC50 values relevant for classification:			
80-62-6 methyl methacrylate			
Oral	LD 50	> 5000 mg/kg (rat)	
Dermal	LD 50	> 5000 mg/kg (kan)	
Inhalative	LC 50 (4h)	29,8 mg/l (rat)	

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU

Classification Guidelines for Preparations as issued in the latest version:

Irritant

12. Ecological information

Toxicity

Acquatic toxicity:		
80-62-6 methyl methacrylate		
EC 0	100 mg/l (Pseudomonas pudita)	
EC 3 (8d)	37 mg/l (Scenedesmus subspicatus od. quadricauda)	
EC 50 (48h)	69 mg/l (Daphnia magna)	
EC 50 (96h)	170 mg/l (Selenastrum capricornutum)	
LC 50 (96h)	> 79 mg/l (fish)	
NOEC	37 mg/l (Daphnia magna)	

Persistence and degradability No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential No further relevant information available.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects No further relevant information available.

13. Disposal considerations

Waste treatment methods

Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:

Recommendation:

Packaging may be reused or recycled after cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleansing agents: Acetone, ethylacetate

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14. Transport information

UN-Number

ADR, IMDG, IATA UN1866

UN proper shipping name

ADR 1866 RESIN SOLUTION RESIN SOLUTION

Transport hazard class(es)

ADR



Class 3 Flammable liquids.

Label 3

IMDG, IATA



Class 3 Flammable liquids.

Label 3

Packing group

ADR, IMDG, IATA II

Environmental hazards:

Marine pollutant: No

Special precautions for user Warning: Flammable liquids.

Danger code (Kemler): 33 EMS Number: F-E,S-E

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

ADR

Tunnel restriction code D/E

15. Regulatory information

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

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



Xi Irritant

F Highly flammable

Hazard-determining components of labelling:

methyl methacrylate

Risk phrases:

11 Highly flammable.

37/38 Irritating to respiratory system and skin.43 May cause sensitisation by skin contact.

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Safety phrases:

Keep container tightly closed in a cool place.

9 Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking. 16

Avoid contact with skin. 24

Wear suitable gloves and eye/face protection. 37/39

This material and its container must be disposed of as hazardous waste. 60

National regulations:

Technical instructions (air):

Class	Share in %
I	<u><</u> 0,5
NK	50-100

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has been carried out.

16. Other information

Relevant phrases

R11 Highly flammable.

R25 Toxic if swallowed.

R37/38 Irritating to respiratory system and skin.

May cause sensitisation by skin contact. R43

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Further information

Other information: The information accumulated herein is believed to be accurate but is

not warranted to be whether originating with the company or not.

Recipients are advised to confirm in advance of need that the information

is current, applicable, and suitable to their circumstances.

Telefon:

Fax: