

! SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Name of product SOLID SEAL B-Komponente

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

No information available.

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor TPH Bausysteme GmbH
Nordportbogen 8, D-22848 Norderstedt
Phone +49 (0)40 / 52 90 66 78-0, Fax +49 (0)40 / 52 90 66 78-78
E-Mail info@tph-bausysteme.com
Internet www.tph-bausysteme.com

Advice

E-mail (competent person):
sdb-info@tph-bausysteme.com

1.4. Emergency telephone number

Emergency advice GIZ-Nord
Phone +49 (0)551 / 19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
Acute Tox. 4	H332	
Skin Irrit. 2	H315	
Eye Irrit. 2	H319	
Resp. Sens. 1	H334	
Skin Sens. 1	H317	
Carc. 2	H351	
STOT SE 3	H335	
STOT RE 2	H373	

Hazard statements for health hazards

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Additional hints

This mixture is classified as hazardous according to Regulation (EC) No 1272/2008 [GHS].

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS07



GHS08

Signal word

Danger

Hazard statements for health hazards

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H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
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Precautionary Statements

Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of water/soap.
P304 + P340	IF INHALED: Remove person to fresh air and keep 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.

Hazardous ingredients for labeling

4,4'-methylenediphenyl diisocyanate, Isocyanic acid, polymethylenepolyphenylene ester, o-(p-isocyanatobenzyl)phenyl isocyanate

Special rules for supplemental label elements for certain mixtures

Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
101-68-8	202-966-0	4,4'-methylenediphenyl diisocyanate	< 10	Carc. 2, H351 / Acute Tox. 4, H332 / STOT RE 2, H373 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Resp. Sens. 1, H334 / Skin Sens. 1, H317

Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
9016-87-9		Isocyanic acid, polymethylenepolyphenylene ester	50 - 100	Acute Tox.4, H332 / Skin. Irrit.2, H315 / Eye Irrit. 2, H319 / Resp. Sens. 1, H334 / Skin. Sens. 1, H317 / Carc. 2, H351 / STOT SE 3, H335 / STOT RE 2, H373
		Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl)phenylisocyanate	5 - 15	Carc. 2, H351 / Acute Tox. 4, H332 / STOT RE 2, H373 / Eye Irrit. 2, H319 / STOT SE 3, H335 / Skin Irrit. 2, H315 / Resp. Sens. 1, H334 / Skin Sens. 1, H317

REACH

CAS No	Name	REACH registration number
	Reaction mass of 4,4'-methylenediphenyldiisocyanate and o-(p-isocyanatobenzyl)phenylisocyanate	01-2119457015-45

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of inhalation

Ensure of fresh air.

Seek medical treatment immediately.

In case of skin contact

In case of contact with skin wash off immediately with soap and water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse with plenty of water carefully. In the event of persistent symptoms seek medical treatment.

In case of ingestion

Do not induce vomiting.

Call for a doctor immediately.

Rinse out mouth thoroughly with water.

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

No information available.

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

Treatment (Advice to doctor)

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam

Dry powder

Gaseous fire-extinguishing substance

Carbon dioxide

Unsuitable extinguishing media
water

5.2. Special hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

In the event of fire the following can be released:

Nitrogen oxides (NO_x)

Carbon monoxide (CO)

Carbon dioxide (CO₂)

Hydrogen cyanide (HCN)

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Wear full protective clothing.

Additional information

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal protection by wearing close-fitting protective clothing and breathing apparatus.

High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not discharge into the drains or bodies of water..

Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand).

Do not take up with sawdust or other combustible materials.

After taking up the material dispose according to regulation.

Additional Information

Informations for disposal see chapter 13.

6.4. Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

No special measures necessary if used correctly.

Take the usual precautions when handling with chemicals.

General protective measures

Avoid contact with eyes and skin

Do not inhale gases/vapours/aerosols.

Hygiene measures

At work do not eat, drink and smoke.
Remove soiled or soaked clothing immediately.
Wash hands before breaks and after work.

Advice on protection against fire and explosion

No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.
Do not use containers, leads, pipes a.s.o. of copper or copper-containing alloys.
Use steel or stainless steel containers.

Advice on storage compatibility

Keep away from water.

Further information on storage conditions

Store closed container at cool and aired place.
Protect from frost.
Protect from atmospheric moisture and water

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Respiratory protection

If ventilation insufficient, wear respiratory protection.

Hand protection

Synthetic rubber gloves
PVC gloves

Eye protection

tightly fitting goggles

Other protection measures

protective clothing

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

liquid

Colour

dark brown

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				
Acid number	not applicable				
boiling range	> 300 °C				
melting point	not determined				
Flash point	220 °C			closed cup	
Vapourisation rate	not determined				
Flammable (solid)	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	not determined				
Self ignition temperature	> 600 °C				
Lower explosion limit	not applicable				
Upper explosion limit	not applicable				
Vapour pressure	not determined				
Relative density	ca. 1,23 g/cm ³	23 °C		DIN EN ISO 2811-1	
Bulk density	not applicable				
Vapour density	8,5				
Solubility in water					Reacts with water
Solubility/other			not determined		
Partition coefficient n-octanol/water (log P O/W)	not applicable				
Decomposition temperature	No data available				
Viscosity dynamic	ca. 100 mPa*s	23 °C		DIN EN ISO 2555	
Solvent separation test	not applicable				
Solvent content	0 %				

	Value	Temperature	at	Method	Remark
Water content	not applicable				
Solids content	not applicable				
Combustion value	not applicable				
Oxidising properties					
no					
Explosive properties					
no					
9.2. Other information					
no					

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Reaction with water, with formation of carbon dioxide.

Reactions with alcohols, amines, aqueous acids and alkalies.

10.5. Incompatible materials

Substances to avoid

Reactions with acids.

Reactions with water.

Reactions with alcohols.

Reactions with alkalies.

Reactions with amines.

10.6. Hazardous decomposition products

Carbon monoxide

Carbon dioxide

HCN

Nitrous oxides (NO_x)

Hydrocarbons

Thermal decomposition

Remark No decomposition if used as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritation/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 5000 mg/kg	rat		
LD50 acute dermal	> 5000 mg/kg	rabbit		
LC50 acute inhalation	0,49 mg/l (4 h)	rat		
Skin irritation		not determined		
Eye irritation		not determined		
Skin sensitization	non-sensitizing	Guinea pig	OECD 406	
Sensitization respiratory system	sensitizing	Guinea pig	No official guidelines	

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Subacute Toxicity	not determined			
Subchronic Toxicity	not determined			
Chronic Toxicity	NOEC dusts and mist 0,2 mg/m3 Combined Chronic Toxicity / Carcinogenic Studies	rat	OECD 453	positive
Mutagenicity	OECD 474 Mammalian Erythrocyte Micronucleus Test		OECD 474	not mutagenic
Reproduction-Toxicity	NOAEL 12 mg/m3 Prenatal Developmental Toxicity Study	rat	OECD 414	
Carcinogenicity	Combined Chronic Toxicity / Carcinogenic Studies	rat	OECD 453	positive

Specific target organ toxicity (single exposure)

No data available

Specific target organ toxicity (repeated exposure)

No data available

Aspiration hazard

No data available

Experiences made from practice

Sensitization through inhalation possible.
Sensitization through skin contact possible.
Irritates respiratory tract.
Irritates eyes and skin.

Additional information

The declarations of toxicology refer to main component.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 > 1000 mg/l (96 h)		OECD 203	
Daphnia	EC50 > 1000 mg/l (24 h)	Daphnia magna	OECD 202	
Algae	EC50 > 1640 mg/l (72 h)		OECD 201, cell reproduction	
Bacteria	EC50 > 100 mg/l (3 h)	activated sludge	OECD 209, oxygen consumption	

12.2. Persistence and degradability

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	not determined			
Biological degradability	0 % (28 d)	Inherent Biodegradability: Modified MITI Test (II)	OECD 302 C	not degradable
Degradability				not readily degradable
Biological eliminability				Readily eliminable from water
Degradability according to WRMG	not determined			

12.3. Bioaccumulative potential

not determined

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

Behaviour in sewage plant

The product can cause foaming in sewage treatment plants.

Respiration inhibition of activated sludge

	Value	Method	Remark
EC 50	not determined		

Additional ecological information

	Value	Method	Remark
OC	not determined		
COD	not determined		
BOD	not determined		

Contains following heavy metals and compounds of the 76/464/EWG

no

General regulation

Product is not allowed to be discharged into aquatic environment, drains or sewage treatment plants.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Waste code No.**

08 05 01*

16 03 05*

Name of waste

waste isocyanates

organic wastes containing hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

Recommendations for the product

In accordance with regulations for special waste, must be taken to a special waste disposal.

Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	-	-	-
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-

	ADR/RID	IMDG	IATA-DGR
14.4. Packing group	-	-	-
14.5. Environmental hazards	-	-	-
14.6. Special precautions for user No information available.			
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available.			
Land and inland navigation transport ADR/RID No dangerous goods as defined by these transport regulations.			
Marine transport IMDG No dangerous goods as defined by these transport regulations.			
Air transport ICAO/IATA-DGR No dangerous goods as defined by these transport regulations.			
Transport/further information No dangerous goods as defined by the transport regulations - ADR/RID, IMDG, ICAO/IATA-DGR.			

SECTION 15: Regulatory information

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

National regulations

Other regulations, restrictions and prohibition regulations

Work medicine Principles G27: "Isocyanate"

ZH 1/34 "Data Sheet: Polyurethane manufacture / Isocyanate (M 044)"

ZH 1/129 "Data Sheet: Irritating substances / corrosive substances (M 004)"

Water hazard class 1 Mixture-WGK

Decree for case of interference/remarks Accident decree, addendum II: not named.

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Recommended uses and restrictions

National and local regulations concerning chemicals shall be observed.

Further information

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 2.3

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
- H373 May cause 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).