

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

**1.1. Product identifier**

Name of product PUR-O-CRACK 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**

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.

**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**

diphenylmethane-4,4'-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	diphenylmethane-4,4'-diisocyanate	35 - 50	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]
5873-54-1	227-534-9	o-(p-isocyanatobenzyl)phenyl isocyanate	35 - 50	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
9016-87-9		Isocyanic acid, polymethylenepolyphenylene ester	10 - 20	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

**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 thoroughly with plenty of water and seek medical advice.

**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**

**Physician's information / possible symptoms**

The following symptoms may occur:

Coughing

Asthmatic complaints

**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<sub>x</sub>)  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)  
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

**Storage group** 10

**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
<b>pH value</b>	not applicable				
<b>Acid number</b>	not applicable				
<b>boiling range</b>	> 300 °C				
<b>melting point</b>	not determined				
<b>Flash point</b>	184 °C			closed cup	
<b>Vapourisation rate</b>	not determined				
<b>Flammable (solid)</b>	not determined				
<b>Flammability (gas)</b>	not determined				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>	> 600 °C				
<b>Lower explosion limit</b>	not applicable				
<b>Upper explosion limit</b>	not applicable				
<b>Vapour pressure</b>	not determined				
<b>Relative density</b>	ca. 1,21 g/cm <sup>3</sup>	23 °C		DIN EN ISO 2811-1	
<b>Bulk density</b>	not applicable				
<b>Vapour density</b>	8,5				
<b>Solubility in water</b>					Reacts with water
<b>Solubility/other</b>				not determined	
<b>Partition coefficient n-octanol/water (log P O/W)</b>	not applicable				
<b>Decomposition temperature</b>	not determined				
<b>Viscosity dynamic</b>	ca. 30 mPa*s	23 °C		DIN EN ISO 2555	
<b>Solvent separation test</b>	not determined				
<b>Solvent content</b>	0 %				

	Value	Temperature	at	Method	Remark
<b>Water content</b>	0 %				
<b>Solids content</b>	not applicable				
<b>Combustion value</b>	not applicable				
<b>Oxidising properties</b>	no				
<b>Explosive properties</b>	no				
<b>9.2. Other information</b>	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 (NOx)

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
<b>LD50 acute oral</b>	> 5000 mg/kg	rat		
<b>LD50 acute dermal</b>	> 9400 mg/kg	rabbit		
<b>LC50 acute inhalation</b>	0,49 mg/l (4 h)	rat		
<b>Skin irritation</b>		not determined		
<b>Eye irritation</b>		not determined		
<b>Skin sensitization</b>	non-sensitizing	Guinea pig	OECD 406	
<b>Sensitization respiratory system</b>	sensitizing	Guinea pig	No official guidelines	

#### Subacute Toxicity - Carcinogenicity

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



**Toxicity test (Additional information)**

no

**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
<b>Fish</b>	LC50 > 1000 mg/l (96 h)		OECD 203	
<b>Daphnia</b>	EC50 > 1000 mg/l (48 h)		OECD 202	
<b>Algae</b>	not determined			
<b>Bacteria</b>	EC50 > 100 mg/l (3 h)		OECD 209	

**12.2. Persistence and degradability**

	Elimination rate	Method of analysis	Method	Validation
<b>Physico-chemical degradability</b>	not determined			
<b>Biological degradability</b>	0 % (28 d)		OECD 302 C	
<b>Degradability</b>	not determined			
<b>Biological eliminability</b>	not determined			
<b>Degradability according to WRMG</b>	not determined			

**12.3. Bioaccumulative potential**

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

No information available.

**12.6. Other adverse effects**

No data available

**Behaviour in sewage plant**  
not determined

**Respiration inhibition of activated sludge**

	Value	Method	Remark
<b>EC 50</b>	not determined		

**Additional ecological information**

	Value	Method	Remark
<b>OC</b>	not determined		
<b>COD</b>	not determined		
<b>BOD</b>	not determined		
<b>AOX</b>	The product contains organically bound halogen in accordance with the formulation. It can contribute to the adsorbable organic halogen value in the effluent from sewage treatment plants.		

**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.  
The information to ecology refers to main component.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Waste code No.	Name of waste
08 05 01*	waste isocyanates
16 03 05*	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
<b>14.1. UN number</b>	-	-	-
<b>14.2. UN proper shipping name</b>	-	-	-

	ADR/RID	IMDG	IATA-DGR
<b>14.3. Transport hazard class(es)</b>	-	-	-
<b>14.4. Packing group</b>	-	-	-
<b>14.5. Environmental hazards</b>	-	-	-
<b>14.6. Special precautions for user</b> No information available.			
<b>14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> No information available.			
<b>Land and inland navigation transport ADR/RID</b> No dangerous goods as defined by these transport regulations.			
<b>Marine transport IMDG</b> No dangerous goods as defined by these transport regulations.			
<b>Air transport ICAO/IATA-DGR</b> No dangerous goods as defined by these transport regulations.			
<b>Transport/further information</b> 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 1/118 "Working with health hazard substances (for the workers) (M 050)"

MAL-Code: 00-5 (Denmark)

MAL-kode (Denmark): 00-5 (Ready-for-use mixture)

**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: 3.8

- 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).