

# SAFETY DATA SHEET

according to Regulation (EC) 1907/2006 (REACH), as amended by 2020/878/EU



## DIFFU - THERM® Developer BEA - N (Cans)

### Identification of the substance/mixture and of the company/undertaking:

#### 1.1. Product identifier

Trade name: Developer  
Article number: BEA - N  
UFI: QCF1-928S-E00S-UVX4

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

##### Application of the substance / the preparation

As **DEVELOPER** at the penetration process by colours acc. to EN ISO 3452-1 [EN 571-1] (DIN 54 152 part 1) for finding surface cracks.

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

##### Manufacturer/Supplier

Helmut Klumpf  
Technische Chemie GmbH & Co. KG  
Industriestr. 15  
D - 45699 Herten Phone.: +49(0)2366 1003 - 0 Email: info@diffu-therm.de

#### 1.4. Emergency telephone number: a.m. or next Emergency phone:

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

| REGULATION (EC) No 1272/2008                        |            |                           |                  |
|-----------------------------------------------------|------------|---------------------------|------------------|
| Hazard class                                        | Category   | Hazard class and category | Hazard statement |
| Flammable liquids                                   | Category 2 | --                        | H225             |
| Serious eye damage/eye irritation                   | Category 1 | --                        | H318             |
| Specific target organ<br>Toxicity - single exposure | Category 3 | Central nervous system    | H336             |

The full text of the hazard statements listed in this section can be found in section 16.

### 2.2. Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.



**Hazard pictograms** GHS02, GHS05, GHS07

**Signal word** Danger

#### Hazard statements

H225 Highly flammable liquid and vapour.  
H318 Causes serious eye damage.  
H336 May cause drowsiness or dizziness.

#### Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Other information on labelling:

Further information: Related to titanium dioxide  
The classification as 'carcinogenic by inhalation' applies only to mixtures in the form of powder containing at least 1% titanium dioxide in particulate form or incorporated in particles with an aerodynamic diameter  $\leq 10 \mu\text{m}$ .  
The product contains less than 1% titanium dioxide in particulate form with an aerodynamic diameter  $\leq 10 \mu\text{m}$ .  
Therefore, the product is not classified as a category 2 carcinogen (H351, inhalation).

### 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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### 3. Composition/information on ingredients

#### 3.1. Chemical characterization:

Mixture of the substances to be labelled from the table and other components not subject to labelling.

| Components:                         | Name of chemical                                                                | weight % |
|-------------------------------------|---------------------------------------------------------------------------------|----------|
| CAS: 71-23-8<br>EINECS: 200-746-9   | propan-1-ol<br>GHS02 Flam. Liq. 2, H225; GHS07 Eye Dam.1, H318; STOT SE 3, H336 | 50 - 80  |
| CAS: 13463-67-7<br>EG-No: 236-675-5 | titan (IV)-oxide,<br>EUH 211                                                    | < 0,5    |

### 4. First aid measures

#### 4.1. Description of first aid measures

##### General information:

Move affected person into fresh air, position comfortably, loosen constricting clothing.

In case of irregular breathing or respiratory arrest, give artificial respiration.

Immediately remove any clothing contaminated with product.

**After inhalation:** Supply fresh air; consult doctor in case of symptoms.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

##### After eye contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Remove contact lenses, if present and easy to do. Continue rinsing.

##### After swallowing:

Rinse mouth with water. Never give an unconscious person anything through the mouth.

DO NOT induce vomiting. Place a vomiting person lying on their back in the recovery position.

Call a doctor immediately.

**Information for doctor** Gastric lavage may be due to aspiration only under endotracheal intubation.

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

Breathing difficulty

Dizziness

Dazed

Unconsciousness

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

No further relevant information available.

### 5. Firefighting measures

#### 5.1. Extinguishing media:

##### Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

##### Unsuitable extinguishing media:

High volume water jet

#### 5.2. Special hazards arising from the substance or mixture

##### Specific hazards during firefighting:

Highly flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.

Vapours may form explosive mixtures with air. Flash back possible over considerable distance.

**Hazardous combustion products:** Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

#### 5.3. Advice for firefighters

In case of fire, wear self-contained breathing apparatus. Wear personal protective equipment.

##### Additional information's:

Cool containers at risk with water spray jet.

### 6. Accidental release measures

#### 6.1. Personal precautions:

Keep away from heat and sources of ignition. Keep away unprotected persons. Use personal protective equipment.

Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours or spray mist.

#### 6.2. Environmental precautions:

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

#### 6.3. Methods and material for containment and cleaning up:

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

Ensure adequate ventilation.

### 6.4. Reference to other sections

See Section 1 for emergency contact information.  
See Section 8 for information on personal protective equipment.  
See Section 13 for waste treatment information.

## 7. Handling and storage

### 7.1. Precautions for safe handling:

#### Advice on safe handling:

Ensure adequate ventilation. Use personal protective equipment.  
Avoid contact with skin, eyes and clothing. Do not inhale vapours or spray mist.

#### Hygiene measures:

Keep away from food, drink and animal feed. Do not eat, drink or smoke in the area of application. Wash hands before breaks and at the end of work. Remove soiled clothing immediately.

### 7.2. Conditions for safe storage, including any incompatibilities:

#### Requirements for storage areas:

Store in a solvent-proof place in the original container. Store on a floor.

#### Advice on protection against fire and explosion:

Keep away from sources of ignition - Do not smoke. Vapours may be invisible, heavier than air and spread along the ground. Vapours may form explosive mixtures with air. Take measures against electrostatic charging. Use only in a place with explosion-proof equipment.

#### Further information on storage conditions:

Keep tightly closed in a dry and cool place. Keep away from direct sunlight. Keep in a well-ventilated place.

#### Advice on common storage:

Incompatible with oxidizing agents. Do not store together with oxidizing and self-igniting products. Keep away from food, drink and animal feeding stuffs.

#### German storage class: Flammable liquids

### 7.3. Specific end uses

For dye penetrant testing in accordance with DIN EN ISO 3452-1 [EN 571-1] (54 152 Part 1), for the detection of surface defects.

## 8. Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limit values (Workplace Exposure Limits)

This information is not available

### 8.2. Exposure controls

#### Appropriate engineering controls

Use local and general ventilation.

#### Personal protection equipment

##### General protective and hygienic measures

Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.

##### Breathing equipment:

If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable.

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Half-face filter respirator Type A.

##### Protection of hands: Protective gloves.

##### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

##### 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 safety glasses.

##### Body protection: Protective work clothing.

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### Respiratory sensitisation:

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Germ cell mutagenicity:

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Carcinogenicity:

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Reproductive toxicity:

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Specific target organ toxicity - single exposure

May cause drowsiness or dizziness. (1272/2008/EC, Annex VI)

### Specific target organ toxicity - repeated exposure:

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

### Aspiration hazard:

Shall not be classified as presenting an aspiration hazard.

### Information on other hazards

### Endocrine disrupting properties

Not listed.

## 12. Ecological information

### 12.1. Toxicity

| Aquatic toxicity:   |                                                                                                                                                                                                                                    |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 71-23-8 propan-1-ol |                                                                                                                                                                                                                                    |
| EC 50               | > 1.000 mg/l (Chronic bacterial toxicity) (3h/ activated sludge, (OECD 209))<br>17.700 mg/l (Acute bacterial toxicity) ((Photobacterium phosphoreum))<br>3.644 mg/l (Acute daphnia toxicity) (Daphnia magna, (DIN 38412, Part 11)) |
| LC 50               | 4.555 mg/l (Acute fish toxicity (96h)) ((Pimephales promelas))                                                                                                                                                                     |

### 12.2. Persistence and degradability Easily biodegradable

Degree of elimination: > 83%

### 12.3. Bioaccumulative potential

Concentration in organisms is not expected. log P(o/w): <1

### 12.4. Mobility in soil No further relevant information available.

#### Ecotoxicological effects:

#### Remark:

During correct introduction of low concentrations to adapted biological purification plants no disturbances the degradation of the activated sludge can be expected.

### 12.4 .Additional ecological information:

CSB-value: ca. 2230 mg O<sub>2</sub>/g

BSB<sub>5</sub>-value: 1630 mg O<sub>2</sub>

#### General notes:

The product may not be released into the aquatic environment without preliminary treatments (biological purification plant). Water hazard class 1 (Assessment by list): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

### 12.5. Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### 12.6. Endocrine disrupting properties

Not listed.

### 12.7. Other adverse effects

Data are not available.

#### Remarks

Wassergefährdungsklasse, WGK (water hazard class): 1.

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### 13. Disposal considerations

#### 13.1. Waste treatment methods

- Product** : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
- Contaminated Packaging** : Container must be completely emptied and must not be opened by force. Hand over to authorized disposal agency. Dispose of it in accordance with local regulations.
- European Waste Catalogue Number** : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in Consultation with the regional waste disposer

### 14. Transport information

#### 14.1. UN number or ID number

1987

#### 14.2. UN proper shipping name

ADR Alcohols, n.o.s. (n-Propanol)  
RID Alcohols, n.o.s. (n-Propanol)  
IMDG Alcohols, n.o.s. (n-Propanol)  
ICAO-TI und IATA-DGR Alcohols, n.o.s. (n-Propanol)

#### 14.3. Transport hazard class(es)

ADR-Class : 3  
shipment category : 2  
(Labels; Classification Code; Hazard : 3; F1; D/E  
Identification Number; Tunnel restriction code)  
RID-Class : 3; F1  
Labels; Classification Code; Hazard  
Identification Number)  
IMDG-Class : 3  
(Labels; EmS) : F-E, S-D  
ICAO-TI und IATA-DGR : 3

#### 14.4. Packaging group

ADR : III  
RID : III  
IMDG : III  
IATA : III

#### 14.5. Environmental hazards

Environmentally hazardous according to ADR : no  
Environmentally hazardous according to RID : no  
Marine Pollutant according to IMDG-Code : no

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

### 15. Regulatory information

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

##### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

##### Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG). Take note of the national regulations on the protection of young people at work.

##### National regulations

**Water hazard class:** Water hazard class 1 (Assessment by list): slightly hazardous for water.

#### 15.2. Chemical safety assessment: A Chemical Safety Assessment has been carried out for this substance.

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### 16. Other information

**Full text of the hazard statements in sections 2 and 3.**

- H225 Highly flammable liquid and vapour.
- H318 Causes serious eye damage.
- H336 May cause drowsiness or dizziness.

**Department issuing data specification sheet:**

**Contact:** Helmut. Klumpf Technische Chemie GmbH & Co. KG

**Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organization
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally contractual relationship.