

1. Identification of the substance/mixture and of the company/undertaking:

Product identifier

Trade name: Penetrant

Article number: BDR

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

Application of the substance / the preparation

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

Details of the supplier of the safety data sheet

Manufacturer/Supplier

Helmut Klumpf

Technische Chemie KG

Industriestr. 15

D - 45699 Herten Phone.: +49(0)2366 1003 - 0 Fax: +49(0)2366 1003 - 11 Email: klumpf@diffu-therm.de

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

2. Hazards identification

Classification of the substance or mixture

GHS02 Flammable Aerosol, Category 1

GHS07 Exclamation mark

STOT SE. 3 H336 May cause drowsiness or dizziness.

GHS08 Health hazard

Carcinogenicity: Carc. 2 H351 Suspected of causing cancer.

Labelling according to Regulation (EC) No 1272/2008

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



Hazard pictograms GHS02, GHS 07, GHS08

Signal word Danger

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

Results of PBT and PvB assessment

PBT: Not applicable, **vPvB:** Not applicable

3. Composition/information on ingredients

Chemical characterization:

Aerosol with mixture of substances listed below and non-hazardous additions.

| Components: | Name of chemical | weight % |
|---------------------------------------|----------------------------------------------------------------------|----------|
| CAS: 64742-94-5 EINECS: 265-198-5 | aromatic hydrocarbons GHS08, H302, EUH066, H304, H336, H412 | < 20 |
| CAS: 564742-47-8 EINECS: 265-149-8 | aliphatic hydrocarbons GHS08, H302, EUH066, H304, H336 | < 20 |
| CAS: EG-No.: 919-164-8 | C10-C13, n-alkanes, isoalkanes, cyclenes GHS08 H304, EUH066, H412 | < 40 |
| CAS: 106-97-8 EINECS: 203-448-7 | n-butane GHS02 Flam. Gas 1, H220; GHS04 | < 20 |
| CAS: 74-98-6 | propane | < 20 |

| | | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|------|
| EINECS: 200-827-9 | GHS02 Flam. Gas 1, H220; GHS04 | |
| CAS: 196823-11-7 EINECS: listed | oxirane, methyl-, polymer with oxirane, mono isotridecyl ether, block GHS07 Eye Dam./Irrit. 2, H319 signal word: Attention | < 10 |
| CAS: 57712-94-4 EG-No.: 260-913-7 | C.I. Solvent Red 19 GHS08 Carc. 2, H351 | < 1 |
| CAS: 56358-09-9 EG-No.: 260-124-8 | C.I. Solvent Red 19 GHS08 Carc. 2, H351 | < 1 |
| EG-No.: 919-284-0 | hydrocarbons, C10, aromatics, < 1% naphthalene GHS08 Carc. 2, H351 | < 1 |
| EG.-No. 926-273-4 | hydrocarbons, C10 - C13, aromatics, < 1% naphthalene GHS08 Carc. 2, H351 | < 1 |

4. First aid measures

General information:

Take affected persons out of danger area and lay down..

After inhalation:

Fresh air, if necessary give artificial respiration heat. Then consult a doctor.

If unconscious place in the recovery position.

After skin contact:

Wash immediately with soap and water and rinse thoroughly. Consult a doctor if skin irritation persists.

After eye contact:

Flush eyes for several minutes holding eyelids open water. If symptoms persist Complaints consult a physician.

After swallowing

Do not induce vomiting. Then consult a doctor.

5. Fire fighting measures

Suitable extinguishing material:

ABC powder, foam, carbon dioxide.

Extinguishing material that must not be used for safety reasons:

Full water jet.

Special exposure hazards extinguishing from the substance or preparation itself, combustible products or resulting gases:

None

Special protective equipment for fire fighters:

None

Additional information's:

Cool containers at risk with water spray jet.

Danger for bursting of aerosols when heated for more than 50°C.

Aerosols that burst in fire can be mightily shot away.

6. Accidental release measures

Personal precautions:

Avoid contact with skin and eyes.

Ventilate contaminated area thoroughly.

Do not breathe vapor. Remove sources of ignition. Do not smoke. avoid sparks.

Environmental precautions:

Do not discharge into the subsoil/soil.

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up:

Take up with absorbent material

(e.g. sand, sawdust, kieselguhr, general-purpose binder).

7. Handling and storage

Handling:

Advice on safe handling:

Ensure good ventilation / exhaustion at the workplace. Avoid contact with eyes.

Advice on protection against fire and explosion:

Keep away from sources of ignition.

Do not smoke. Take precautionary measures against static discharges.

| | | | |
|-----------------------------|-------------|-------------------|--------------------|
| Explosion limits | Lower e.l.: | 0,6 | Vol.% |
| | Upper e.l.: | 7 | Vol.% |
| Vapour pressure (20°C): | | 30 | mbar |
| Density (20°C): | | 0,87 | g/cm ³ |
| Solubility in water (20°C): | | Emulsion in water | |
| Viscosity (20°C): | | 3 | mm ² /s |

10. Stability and reactivity

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

Materials to be avoided:

Reacts with strong oxidizing agents.

Dangerous reactions:

No dangerous reactions known.

11. Toxicological information

Acute Toxicity:

Irritability/Corrosiveness:

Skin: Cause defatting of the skin mild irritant.

Eye: slightly irritant

Sensitization:

No sensitization known.

Additional information:

The possibility of a reductive fission causes the suspicion that AZO dye-stuffs release cancerogen aromatic amines. It is dangerous if the AZO dye-stuffs are absorbed from the body. Resorption of those dye-stuffs can be effected by inhalation, swallowing of dusts or aerosols as well as by skin contact

12. Ecological information

Data on elimination (persistence and degradability):

Can be eliminated from the water by precipitation or flocculation.

Danger class for water (WKG 2 German only) = dangerous for water

To eliminate the accumulating during the intermediate cleaning dirty water, the flocculation precipitation or activated carbon adsorption is.

Behaviour in environment compartments:

Not known.

Eco toxicological effects:

No data are available.

Behaviour in sewage plant:

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

General information's:

The behaviour of the product in sewage treatment plants has not been tested.

The information on this was derived from products of similar structure or composition.

13. Disposal considerations

Product:

Recommendations:

Hand over to authorized disposal agency.

Waste code No.:

EAV: 14 06 03 term: Mixture of solvent

Contaminated packaging:

Recommendations:

Container must be completely emptied and must not be opened by force.

Hand over to authorized disposal agency.

Waste code No.:

EAV: 15 01 10 term: Iron-metal containers with a contaminated rest of the contents

Waste treatment methods

Recommendations

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

Disposal must be made according the local authority regulations.

14. Transport information

Land transport

UN-No.: 1950 Identification: DRUCKGASPACKUNGEN flammable
Class: 2 Package Group: -- Tunnel restriction code: D
Classifications code: 5 F shipment category: 2
Labelling of the Package: UN 1950 AEROSOLE Label-no.: 2.1
Packing instruction: P 003, MP 9 Limited Quantities Only: 1L (Package ≤ 30 kg)

Marine transport IMDG/GGVSee

UN-No.: 1950 Class: 2.1 Package Group: --
EMS-No.: F-D, S-U Label-no.: -- Marine Pollutant: -- Label: --
Proper Shipping Name: Aerosols (Limited Quantities Only) (Package ≤ 30 kg)

Air transport ICAO-TI and IATA-DGR

Class/Division: 2.1 UN/ID-No.: 1950
Package Group: --, Label: 2.1
Packing inst. Passenger aircraft: 203/Y203 Max. net/Package: 75 kg/30 kg
Packing inst. Cargo aircraft: 203 Max. net/Package: 150 kg
Proper Shipping Name: Aerosols, flammable

15. Regulatory information

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.

Relevant phrases

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

National regulations

Water hazard class: Danger class for water (WKG 2 German only) = dangerous for water

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

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.

Department issuing data specification sheet:

Contact: Helmut. Klumpf Technische Chemie 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