

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

Product identifier

Trade name: Cleaner

Article number: BRE - 2

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

Application of the substance / the preparation

As Cleaner 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

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

2. Hazards identification

Classification of the substance or mixture

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Labelling according to Regulation (EC) No 1272/2008

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



Hazard pictograms GHS02

Signal word Danger

Hazard statements

H225 Highly flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P233 Keep container tightly closed.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower.

P403+P235 Store in a well-ventilated place. Keep cool.

Results of PBT and PvB assessment

PBT: Not applicable; vPvB: Not applicable

3. Composition/information on ingredients

Chemical characterization: Mixture of the substances with harmless additions.

Components:	Name of chemical	weight %
CAS: 64-17-5	ethanol	> 50
EINECS: 200-578-6	GHS02 Flam. Fl. 2, H225	
CAS: 67-63-0	propan-2-ol	< 10
EINECS: 200-661-7	GHS02 Flam. Liq. 2, H225; GHS07 Eye Irrit. 2, H319; STOT SE 3, H336	

4. First aid measures

Description of first aid measures

General information

Take affected persons out of danger area and instruct to lie down.

Instantly remove any clothing soiled by the product.

After inhalation

Supply fresh air; consult doctor in case of symptoms.

After skin contact

After prolonged contact with skin defatting, use barrier cream after prolonged skin contact.

Immediately wash with water and soap and rinse thoroughly.

After eye contact

Rinse opened eye for at least 15 minutes under running water. Get medical attention if irritation occurs.

After swallowing

Rinse mouth with water. If the material has been swallowed and the person is conscious, give small quantities of water to drink. Seek medical attention if symptoms occur.

Do not induce vomiting - aspiration!

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. Fire fighting measures

Description of first aid measures

Suitable extinguishing agents

CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam, water haze, water spray-jet.

For safety reasons unsuitable extinguishing agents Water with a full water jet.

Special hazards arising from the substance or mixture

Ignitable vapour-air mixtures are heavier than air, spreads along the ground. Inflammation of further removal is possible.

Advice for firefighters

Use water spray to cool fire exposed surfaces and to protect.

Runoff from fire control materials or dilution from entering into waters, sewers or drinking water supply.

Protective equipment: Wear self-contained breathing apparatus.

Additional information:

Collect contaminated fire fighting water separately. It must not enter drains.

Cool endangered containers with water spray jet.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources. Do not smoke.

Wear protective equipment. Keep unprotected persons away.

Avoid contact with eyes and skin.

All persons whose presence is not necessary, remove from exposure.

Close leaks, if possible without personal risk to take.

Ensure good ventilation / exhaustion at the workplace.

Environmental precautions:

Prevent material from reaching sewage system, holes and cellars.

Dilute with much water.

Do not allow to enter drainage system, surface or ground water.

Prevent from spreading (e.g. by damming-in or oil barriers).

Do not allow to enter the ground/soil.

Methods and material for containment and cleaning up:

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Send for recovery or disposal in suitable containers.

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 information on disposal.

7. Handling and storage

Precautions for safe handling

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Material can accumulate static charges which can cause an electrical spark (ignition source).

avoid open fire.

Keep away from direct sunlight and other heat or ignition.

Keep containers tightly sealed.

Open and handle container with care. Avoid contact with eyes and skin.

Information about protection against explosions and fires:

Fumes can combine with air to form an explosive mixture.

Fire class: Fires involving liquids and liquefiable solids. This includes substances that are liquid by the temperature elevation.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Use explosion-proof apparatus / fittings and spark-proof tools.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers:

- Store under dry conditions.
- Store in cool location.
- Use only containers specifically permitted for this substance/product.
- Country-specific requirements for the storage of low water-polluting substances have to be aware.

Information about storage in one common storage facility:

- Store away from oxidizing agents.
- Do not store together with peroxides.

Further information about storage conditions:

- Keep container tightly sealed.
- Store in cool, dry conditions in well sealed containers.
- Store container in a well ventilated position.

Storage class 3A (Flammable liquids - flash point below 55 °C)

Specific end use(s) Observe the technical guidelines for the use of the substance / mixture this.

8. Exposure controls/personal protection

Additional information about design of technical systems:

Electrical equipment must be suitable for temperature class T2. All equipment must comply VbF. Use explosion-proof auxiliary equipment for class EEx e II use.

Control parameters

Components with critical values that require monitoring at the workplace:		
64-17-5	ethanol	(> 50%)
WEL	Long-term value: 380 mg/m ³ , 200 ml/m ³	
67-63-0	propan-2-ol	(< 10%)
WEL	Long-term value: 500 mg/m ³ , 200 ml/m ³	

Exposure controls

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:

- 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.
- Use breathing protection in case of insufficient ventilation.
- If user operations generate dust, fume or mist, use local exhaust ventilation to keep exposure to dust below the exposure limits.

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:

- A chemical goggles is recommended.
- Tightly sealed safety glasses.
- Gauze goggles

Body protection: Protective work clothing.

9. Physical and chemical properties

General Information

Form: Aerosol Colour: clear Smell: alcoholic

Data relevant for safety:

Boiling temperature:		82 °C
Flash point:		≤ 21 °C
Ignition temperature:		363 °C
Explosive properties:	The Product is not explosive, but may form flammable/explosive vapour-air mixture.	
Explosion limits	Lower e.l.:	3,5 Vol.%
	Upper e.l.:	15 Vol.%
Vapour pressure (20°C):		55 mbar
Density (20°C):		0,8 g/cm ³
Solubility in water (20°C):		Fully miscible

10. Stability and reactivity

Reactivity Can form explosive gas-air mixtures.

Chemical stability The material is stable under normal conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions

Forms explosive gas mixture with air

Reaction with strong reducing agents such as metal hydrides or alkali metals will generate hydrogen gas which could create an explosive hazard.

Reacts with peroxides

Reacts with oxidizing agents

Conditions to avoid

Avoid shock, friction, heat, sparks, open flame and other ignition sources. Prevent electrostatic charging.

Incompatible materials:

alkali metals,
acetic anhydride

Reacts with strong oxidizing agents.

11. Toxicological information

The classification of risk is based on knowledge of the toxicity of the components contained in this product.

Information on toxicological effects

Acute toxicity

LD/LC50 values that are relevant for classification:			
64-17-5 ethanol			
oral	LD50	> 2.000 mg/kg (rat) (OECD- Guideline 401)	
dermal	LD50	> 2.000 mg/kg (rabbit)	
inhaled	LD50	> 20 mg/l (mouse) ((literature value))	
67-63-0 propan-2-ol			
oral	LD50	4.570 mg/kg (rat)	
dermal	LD50	13.400 mg/kg (rabbit)	
inhaled	LD50	30 mg/l (rat) (6h/ LC50 > 25.000 mg/m ³ (steam))	

Primary irritant effect:

on the skin: Possible due to defatting action on prolonged contact may damage the skin.

on the eye: No irritant effect.

Sensitization: No sensitizing effect known.

Repeated dose toxicity Rat, Oral, Exposure time: 90 day, NOAEL: 1.730 mg / kg LOAEL: 3.160 mg / kg

12. Ecological information

Toxicity

<i>Aquatic toxicity:</i>	
64-17-5 ethanol	
EC 50	> 100 mg/l (alg) ((OECD- Guideline 201, Chlorella pyrenoidosa)) > 100 mg/l (Daphnia) ((OECD- Guideline 202, Daphnia magna))
LC 50	> 100 mg/l (Acute fish toxicity) (48h/(OECD- Guideline 203, Leuciscus idus))
67-63-0 propan-2-ol	
EC 50	> 100 mg/l (alg) > 100 mg/l (Daphnia) > 100 mg/l (fi2) (96h) > 100 mg/l (kru) (48h)

Persistence and degradability

The material is degraded quickly. All individual organic components contained in the product are, with least 60% BOD28/COD in the Closed Bottle test or with at least 70% DOC reoval in the Modified OECD Screening Test, really biodegradable according to the OECD classification.

Easily biodegradable

Bioaccumulative potential Concentration in organisms is not expected.

Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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

Product:

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.

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

European waste catalogue -

Uncleaned packagings:

Recommendations

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

Empty container completely. Residues may cause an explosion.

Do not pressurize containers, cut, weld, braze, solder, drill, grind. Don not expose containers to heat, flames, sparks, static electricity or other flammable products. They may explode and cause injury or death.

Recommended cleaning agent: Water, if necessary with cleaning agent.

14. Transport information

Land transport

UN-No.: 1987 Identification: ALKOHOLE, N.A.G. (Ethanol/Isopropyl alcohol)

Class: 3 Package Group: II Tunnel restriction code: D/E

Classifications code: F1 shipment category: 2 Label-no.: 3

Packing instruction: P 001, MP 19 Limited Quantities Only: 1L (LQ)

Marine transport IMDG/GGVSee

UN-No.: 1987 Class: 3.2 Package Group: II

EMS-No.: F-E, S-D Label-no.: 3 Marine Pollutant: -- Label: --

Proper Shipping Name: Alcohols, n.o.s. (Ethanol/Isopropyl alcohol (2-Propanol))

Air transport ICAO-TI and IATA-DGR

Class/Division: 3 UN/ID-No.: 1987

Package Group: II Label: 3

Packing inst. Passenger aircraft: 305/Y305 Max. net/Package: 5 L / 1 L

Packing inst. Cargo aircraft: 307 Max. net/Package: 60 L

Proper Shipping Name: Alcohols, n.o.s. (mixture of Ethanol/Isopropyl alcohol)

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

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

National regulations

Technical instructions (air):

Class	Share in %
NK	100.0

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous 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