

Artikelnummer / Article number 99410
Handelsname / Trade name KREUL Vergolden mit Blattmetall Set Golden Elegance /
KREUL Gilding with Leaf Metal Set Golden Elegance

Dieser Artikel enthält unterschiedliche Bestandteile. Die Erstellung eines gemeinsamen Sicherheitsdatenblattes für diesen Artikel ist daher nicht möglich. Deshalb finden sich im Anhang die Sicherheitsdatenblätter zu den einzelnen Bestandteilen.

This item contains different components. It is therefore not possible to create a unique safety data sheet for this item. The safety data sheets for the individual components can be found in the appendix.

Bestandteile / Components:

KREUL Anlegemilch 50 ml / KREUL Primer for Leaf Metal 50 ml

KREUL Überzugslack für Blattmetall 50 ml / KREUL Coating Varnish for Leaf Metal 50 ml

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

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

- **1.1 Product identifier**
- **Trade name:** **KREUL Primer for Leaf Metal 20 ml (20 g), 50 ml (51 g)**
- **Article number:** 99420, 99450
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Adhesives
For artists and hobby user.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
C. KREUL GmbH & Co. KG
Carl-Kreul-Straße 2
D-91352 HALLERNDORF
GERMANY
Phone: + 49 (0) 9545/925 - 0
Fax: + 49 (0) 9545/925 - 511
info@c-kreul.de
- **Further information obtainable from:**
Product Safety Department:
Treiber, b.treiber@c-kreul.de
- **1.4 Emergency telephone number:**
Phone: + 49 (0) 9545/925 - 0
Fax: + 49 (0) 9545/925 - 511
(Monday - Thursday 8.00 - 17.00, Friday 8.00 - 15.00)

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**
EUH208 Contains 1,2-benzisothiazol-3(2H)-one, 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:**
Mixture of substances listed below with nonhazardous additions.
Mixture based on water, binders and additives.

(Contd. on page 2)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 1)

Dangerous components:

| | | |
|---|---|------------------|
| CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60-XXXX | 1,2-benzisothiazol-3(2H)-one ⚠ Acute Tox. 1, H330; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1; H317: C ≥ 0.05 % | <0.05% |
| CAS: 55965-84-9 Index number: 613-167-00-5 | 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1) ⚠ Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; ⚠ Skin Corr. 1C, H314; Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ⚠ Skin Sens. 1A, H317 Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 % | 0.00025–<0.0015% |

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· **4.1 Description of first aid measures**

· **General information:** No special measures required.

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

· **After skin contact:**

Wash with water and acidic soap.

If skin irritation continues, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

Remove contact lenses.

· **After swallowing:**

If symptoms persist consult doctor.

Rinse out mouth and then drink plenty of water.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **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 agents:** Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· **5.3 Advice for firefighters**

· **Protective equipment:** Mouth respiratory protective device.

· **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Not required.

· **6.2 Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· **6.3 Methods and material for containment and cleaning up:**

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

Dispose of the material collected according to regulations.

· **6.4 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 disposal information.

7 Handling and storage

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

· **Information about fire - and explosion protection:**

No special measures required.

The product is not flammable.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

· **Requirements to be met by storerooms and receptacles:** No special requirements.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 2)

- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Protect from heat and direct sunlight.
- **Storage class:** 12
- **7.3 Specific end use(s)** See chapter 1.2.

8 Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
Do not eat, drink, smoke or sniff while working.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Hand protection**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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/face protection** Goggles recommended during refilling

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** Fluid
- **Colour:** Whitish
- **Odour:** Characteristic
- **Odour threshold:** Not determined.
- **Melting point/freezing point:** Undetermined.
- **Boiling point or initial boiling point and boiling range** 100 °C (7732-18-5 water, distilled, conductivity or of similar purity)
- **Flammability** Not applicable.
- **Lower and upper explosion limit**
- **Lower:** Not determined.
- **Upper:** Not determined.
- **Flash point:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH at 20 °C** 6–9
- **Viscosity:**
- **Kinematic viscosity** Not determined.
- **Dynamic:** Not determined.
- **Solubility**
- **water:** Fully miscible.
- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Vapour pressure:** Not determined.
- **Density and/or relative density**
- **Density at 20 °C:** ~1.03 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **9.2 Other information**
- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Auto-ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.

(Contd. on page 4)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 3)

- **Change in condition**
- **Evaporation rate** Not determined.

- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

10 Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

2634-33-5 1,2-benzisothiazol-3(2H)-one

| | | |
|------------|---------|------------------------------|
| Oral | LD50 | 490 mg/kg (rat) |
| Dermal | LD50 | >2,000 mg/kg (rat) |
| Inhalative | LC50/4h | 0.05 mg/m ³ (ATE) |

55965-84-9 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

| | | |
|------------|---------|------------------------------|
| Oral | LD50 | 64 mg/kg (rat) |
| Dermal | LD50 | 87 mg/kg (rab) |
| Inhalative | LC50/4h | 0.05 mg/m ³ (ATE) |

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

12 Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

2634-33-5 1,2-benzisothiazol-3(2H)-one

| | |
|----------|---------------------------------------|
| LC50/96h | 1.6 mg/l (oncorhynchus mykiss) |
| EC50/48h | 2.94 mg/l (daphnia magna) |
| EC50/72h | 0.11 mg/l (selenastrum capricornutum) |

(Contd. on page 5)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 4)

| | |
|-----------|---|
| EC10/72h | 0.04 mg/l (selenastrum capricornutum) |
| ErC50/72h | 0.11 mg/l (pseudokirchneriella subcapitata) |
| NOEC/21d | 1.2 mg/l (daphnia) |
| NOEC/72h | 0.027 mg/l (skeletonema costatum) |
| NOEC/28d | 0.21 mg/l (oncorhynchus mykiss) |

55965-84-9 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

| | |
|----------|--|
| LC50/96h | 0.22 mg/l (oncorhynchus mykiss) (RAC) |
| EC50/48h | 0.1 mg/l (daphnia magna) |
| EC50/72h | 0.048 mg/l (pseudokirchneriella subcapitata) |
| NOEC | 0.004 mg/l (daphnia magna) (OECD 211) |
| ErC50 | 0.0049 mg/l /120h (skeletonema costatum) |
| NOEC/21d | 0.004 mg/l (daphnia) |
| NOEC/48d | 0.00064 mg/l (skeletonema costatum) |
| NOEC/72h | 0.0012 mg/l (pseudokirchneriella subcapitata) (OECD 201) |
| NOEC/28d | 0.098 mg/l (oncorhynchus mykiss) (OECD 210) |

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number · ADR, IMDG, IATA | not regulated |
| · 14.2 UN proper shipping name · ADR, IMDG, IATA | not regulated |
| · 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class | not regulated |
| · 14.4 Packing group · ADR, IMDG, IATA | not regulated |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not regulated |

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

GB
(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 5)

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H301 Toxic if swallowed.
 H302 Harmful if swallowed.
 H310 Fatal in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H330 Fatal if inhaled.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

- **Department issuing SDS:** Product Safety Department

- **Contact:** B. Treiber, b.treiber@c-kreul.de

- **Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 2: Acute toxicity – Category 2

Acute Tox. 1: Acute toxicity – Category 1

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

- *** Data compared to the previous version altered.**

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

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

- **1.1 Product identifier**
- **Trade name:** KREUL Coating Varnish for Leaf Metal 50 ml
- **Article number:** 99400
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture**
Lacquer
For artists and hobby user.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
C. KREUL GmbH & Co. KG
Carl-Kreul-Straße 2
D-91352 HALLERNDORF
GERMANY
Phone: + 49 (0) 9545/925 - 0
Fax: + 49 (0) 9545/925 - 511
info@c-kreul.de
- **Further information obtainable from:**
Product Safety Department:
Treiber, b.treiber@c-kreul.de
- **1.4 Emergency telephone number:**
Phone: + 49 (0) 9545/925 - 0
Fax: + 49 (0) 9545/925 - 511
(Monday - Thursday 8.00 - 17.00, Friday 8.00 - 15.00)

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
The product is not classified, according to the GB CLP regulation.
-
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**
EUH208 Contains 1,2-benzisothiazol-3(2H)-one, 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **3.2 Mixtures**
- **Description:**
Mixture of substances listed below with nonhazardous additions.
Mixture based on water, binders and additeves.

· **Dangerous components:**

| | | |
|---|---|---------|
| CAS: 57-55-6 EINECS: 200-338-0 Reg.nr.: 01-2119456809-23-XXXX | Propylene glycol substance with a Community workplace exposure limit | 2.5-<5% |
|---|---|---------|

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

| | | (Contd. of page 1) |
|---|---|--------------------|
| CAS: 2634-33-5 EINECS: 220-120-9 Index number: 613-088-00-6 Reg.nr.: 01-2120761540-60-XXXX | 1,2-benzisothiazol-3(2H)-one ⚠ Acute Tox. 1, H330; ⚠ Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1; H317: C ≥ 0.05 % | 0.005-<0.05% |
| CAS: 55965-84-9 Index number: 613-167-00-5 | 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1) ⚠ Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330; ⚠ Skin Corr. 1C, H314; Eye Dam. 1, H318; ⚠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ⚠ Skin Sens. 1A, H317 Specific concentration limits: Skin Corr. 1C; H314: C ≥ 0.6 % Skin Irrit. 2; H315: 0.06 % ≤ C < 0.6 % Eye Dam. 1; H318: C ≥ 0.6 % Eye Irrit. 2; H319: 0.06 % ≤ C < 0.6 % Skin Sens. 1A; H317: C ≥ 0.0015 % | 0.00025-<0.0015% |
| · Additional information: For the wording of the listed hazard phrases refer to section 16. | | |

4 First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Wash with water and acidic soap.
If skin irritation continues, consult a doctor.
- **After eye contact:**
Remove contact lenses.
Rinse opened eye for several minutes under running water.
- **After swallowing:**
If symptoms persist consult doctor.
Rinse out mouth and then drink plenty of water.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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 agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.
- **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **6.4 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 disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:**
No special measures required.
The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 2)

Further information about storage conditions:

- Protect from frost.
- Protect from heat and direct sunlight.
- **Storage class:** 12
- **7.3 Specific end use(s)** See chapter 1.2.

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

57-55-6 Propylene glycol

| | |
|-----|--|
| WEL | Long-term value: 474* 10** mg/m ³ , 150* ppm *total vapour and particulates **particulates |
|-----|--|

DNELs

57-55-6 Propylene glycol

| | | |
|------------|---------------------------|---|
| Inhalative | chronic - local effect | 10 mg/m ³ /long-term (general population) 10 mg/m ³ /long-term (worker) |
| | chronic - systemic effect | 50 mg/m ³ /long term (general population) 168 mg/m ³ /long-term (worker) |

PNECs

57-55-6 Propylene glycol

| | |
|------------------------------|-------------|
| water | 183 mg/l |
| freshwater | 260 mg/l |
| marine water | 26 mg/l |
| sewage treatment plant (STP) | 20,000 mg/l |
| freshwater sediment | 572 mg/kg |
| marine sediment | 57.2 mg/kg |
| soil | 50 mg/kg |

· **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
 - Do not eat, drink, smoke or sniff while working.
 - Avoid contact with the eyes and skin.
 - Do not inhale gases / fumes / aerosols.
 - Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Hand protection**
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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/face protection** Goggles recommended during refilling

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

- | | |
|---|--|
| · Physical state | Fluid |
| · Colour: | Colourless |
| · Odour: | Characteristic |
| · Odour threshold: | Not determined. |
| · Melting point/freezing point: | Undetermined. |
| · Boiling point or initial boiling point and boiling range | 100 °C (7732-18-5 water, distilled, conductivity or of similar purity) |
| · Flammability | Not applicable. |
| · Lower and upper explosion limit | |
| · Lower: | Not determined. |
| · Upper: | Not determined. |
| · Flash point: | Not applicable. |
| · Decomposition temperature: | Not determined. |

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 3)

| | |
|---|--|
| · pH at 20 °C | 6–9 |
| · Viscosity: | |
| · Kinematic viscosity | Not determined. |
| · Dynamic: | Not determined. |
| · Solubility | |
| · water: | Fully miscible. |
| · Partition coefficient n-octanol/water (log value) | Not determined. |
| · Vapour pressure at 20 °C: | 23 hPa (7732-18-5 water, distilled, conductivity or of similar purity) |
| · Density and/or relative density | |
| · Density at 20 °C: | ~1.05 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |

| | |
|---|---|
| · 9.2 Other information | |
| · Appearance: | |
| · Form: | Fluid |
| · Important information on protection of health and environment, and on safety. | |
| · Auto-ignition temperature: | Product is not selfigniting. |
| · Explosive properties: | Product does not present an explosion hazard. |
| · Change in condition | |
| · Evaporation rate | Not determined. |

| | |
|---|------|
| · Information with regard to physical hazard classes | |
| · Explosives | Void |
| · Flammable gases | Void |
| · Aerosols | Void |
| · Oxidising gases | Void |
| · Gases under pressure | Void |
| · Flammable liquids | Void |
| · Flammable solids | Void |
| · Self-reactive substances and mixtures | Void |
| · Pyrophoric liquids | Void |
| · Pyrophoric solids | Void |
| · Self-heating substances and mixtures | Void |
| · Substances and mixtures, which emit flammable gases in contact with water | Void |
| · Oxidising liquids | Void |
| · Oxidising solids | Void |
| · Organic peroxides | Void |
| · Corrosive to metals | Void |
| · Desensitised explosives | Void |

10 Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:

57-55-6 Propylene glycol

| | | |
|--------|------|------------------------------|
| Oral | LD50 | 22,000 mg/kg (rat) (ECHA) |
| Dermal | LD50 | >2,000 mg/kg (rabbit) (ECHA) |

2634-33-5 1,2-benzisothiazol-3(2H)-one

| | | |
|------------|---------|------------------------------|
| Oral | LD50 | 490 mg/kg (rat) |
| Dermal | LD50 | >2,000 mg/kg (rat) |
| Inhalative | LC50/4h | 0.05 mg/m ³ (ATE) |

55965-84-9 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

| | | |
|------------|---------|------------------------------|
| Oral | LD50 | 64 mg/kg (rat) |
| Dermal | LD50 | 87 mg/kg (rab) |
| Inhalative | LC50/4h | 0.05 mg/m ³ (ATE) |

- Skin corrosion/irritation Based on available data, the classification criteria are not met.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 4)

- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

12 Ecological information

12.1 Toxicity

· Aquatic toxicity:

57-55-6 Propylene glycol

| | |
|-----------|---|
| LC50/96h | 40,613 mg/l (oncorhynchus mykiss) (ECHA) |
| LC50/48h | 18,340 mg/l (ceriodaphnia dubia) (ECHA) |
| ErC50/72h | 19,300 mg/l (skeletonema costatum) (ECHA) |
| NOEC/18h | >20,000 mg/l (pseudomonas putida) (ECHA) |
| NOEC/7d | 13,020 mg/l (ceriodaphnia dubia) (ECHA) |
| NOEC/14d | <5,300 mg/l (skeletonema costatum) (ECHA) |

2634-33-5 1,2-benzisothiazol-3(2H)-one

| | |
|-----------|---|
| LC50/96h | 1.6 mg/l (oncorhynchus mykiss) |
| EC50/48h | 2.94 mg/l (daphnia magna) |
| EC50/72h | 0.11 mg/l (selenastrum capricornutum) |
| EC10/72h | 0.04 mg/l (selenastrum capricornutum) |
| ErC50/72h | 0.11 mg/l (pseudokirchneriella subcapitata) |
| NOEC/21d | 1.2 mg/l (daphnia) |
| NOEC/72h | 0.027 mg/l (skeletonema costatum) |
| NOEC/28d | 0.21 mg/l (oncorhynchus mykiss) |

55965-84-9 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

| | |
|----------|--|
| LC50/96h | 0.22 mg/l (oncorhynchus mykiss) (RAC) |
| EC50/48h | 0.1 mg/l (daphnia magna) |
| EC50/72h | 0.048 mg/l (pseudokirchneriella subcapitata) |
| NOEC | 0.004 mg/l (daphnia magna) (OECD 211) |
| ErC50 | 0.0049 mg/l /120h (skeletonema costatum) |
| NOEC/21d | 0.004 mg/l (daphnia) |
| NOEC/48d | 0.00064 mg/l (skeletonema costatum) |
| NOEC/72h | 0.0012 mg/l (pseudokirchneriella subcapitata) (OECD 201) |
| NOEC/28d | 0.098 mg/l (oncorhynchus mykiss) (OECD 210) |

12.2 Persistence and degradability

57-55-6 Propylene glycol

| | |
|---------------------------|---------------------------|
| Carbon dioxide production | 81.7 % /28d (OECD 301 F) |
| DOC removal | 98.3 % /28d (OECD 301 F) |
| Oxygen consumption | 106.8 % /28d (OECD 301 F) |

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:**

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

13 Disposal considerations

13.1 Waste treatment methods

· Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

(Contd. on page 6)

GB

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

(Contd. of page 5)

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|---|-----------------|
| · 14.1 UN number or ID number | |
| · ADR, ADN, IMDG, IATA | not regulated |
| · 14.2 UN proper shipping name | |
| · ADR | not regulated |
| · ADN, IMDG, IATA | not regulated |
| · 14.3 Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | not regulated |
| · 14.4 Packing group | |
| · ADR, IMDG, IATA | not regulated |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 Maritime transport in bulk according to IMO instruments | Not applicable. |
| · UN "Model Regulation": | not regulated |

15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
 H301 Toxic if swallowed.
 H302 Harmful if swallowed.
 H310 Fatal in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H330 Fatal if inhaled.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
- **Department issuing SDS:** Product Safety Department
- **Contact:** B. Treiber, b.treiber@c-kreul.de
- **Abbreviations and acronyms:**
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 DNEL: Derived No-Effect Level (UK REACH)
 PNEC: Predicted No-Effect Concentration (UK REACH)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Acute Tox. 2: Acute toxicity – Category 2
 Acute Tox. 1: Acute toxicity – Category 1
 Skin Corr. 1C: Skin corrosion/irritation – Category 1C
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1
 Skin Sens. 1: Skin sensitisation – Category 1
 Skin Sens. 1A: Skin sensitisation – Category 1A
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 23.11.2022

Version number 1.2 (replaces version 1.1)

Revision: 23.11.2022

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

(Contd. of page 6)

· * **Data compared to the previous version altered.**

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