

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

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

- **1.1 Product identifier**
- **Trade name:** KREUL Refill Chalk Marker Snow White 25 ml  
KREUL Refill Chalk Marker medium Snow White Set
- **Article number:** 22741, 22710
- **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**  
Paint  
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  
DEUTSCHLAND  
Tel. + 49 (0)9545 / 925 - 0  
Fax + 49 (0)9545 / 925 - 511  
E-Mail: info@c-kreul.de
- **Further information obtainable from:**  
Product Safety Department:  
Treiber, b.treiber@c-kreul.de
- **1.4 Emergency telephone number:**  
Telephone + 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:**  
EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
- **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.

· **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6 Index number: 603-002-00-5 Reg.nr.: 01-2119457610-43-XXXX	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	5-<10%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide	5-<10%
CAS: 56-81-5 EINECS: 200-289-5	glycerol substance with a Community workplace exposure limit	2.5-<5%

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

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

(Contd. of page 1)

### 4 First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Not applicable.
- **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:**  
Rinse out mouth and then drink plenty of water.  
If symptoms persist consult doctor.
- **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.
- **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:**

<b>64-17-5 ethanol</b>	
WEL	Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm
<b>56-81-5 glycerol</b>	
WEL	Long-term value: 10 mg/m <sup>3</sup>

- **DNELs**

<b>64-17-5 ethanol</b>	
Oral	long-term exposure-systemic effects   87 mg/kg (general population)

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

(Contd. of page 2)

Dermal	long-term exposure-systemic effects	206 mg/kg bw/d (general population) 343 mg/kg bw/d (worker)
Inhalative	long-term exposure-systemic effects	114 mg/m <sup>3</sup> (general population) 950 mg/m <sup>3</sup> (worker)

### · PNECs

#### 64-17-5 ethanol

water	2.75 mg/l
freshwater	0.96 mg/l
marine water	0.79 mg/l
sewage treatment plant (STP)	580 mg/l
freshwater sediment	3.6 mg/kg
soil	0.63 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.

· **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:**

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

Undetermined.

· **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:**

1.0–1.2 g/cm<sup>3</sup>

· **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.

(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

(Contd. of page 3)

· 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:

#### 13463-67-7 titanium dioxide

Oral	LD50	>20,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)
Inhalative	LC50/4h	>6.82 mg/m <sup>3</sup> (rat)

#### 64-17-5 ethanol

Oral	LD50	10,470 mg/kg (rat) (OECD 403)
Dermal	LD50	>2,000 mg/kg (rat) 12,800 mg/kg (rabbit)
Inhalative	LC50/4h	124.7 mg/m <sup>3</sup> (rat) (OECD 403)

#### 56-81-5 glycerol

Oral	LD50	12,600 mg/kg (rat)
------	------	--------------------

#### 471-34-1 calcium carbonate

Oral	LD50	6,450 mg/kg (rat)
------	------	-------------------

- **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.

GB

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

(Contd. of page 4)

### 12 Ecological information

#### · 12.1 Toxicity

##### · Aquatic toxicity:

##### 13463-67-7 titanium dioxide

EC50	>100 mg/l (pseudokirchneriella subcapitata) (OECD 201)
	>10,000 mg/l (skeletonema costatum) (ISO 10253)
NOEC	>100,000 mg/l (hyalella azteca) (ASTM 1706)
LC50	>10,000 mg/l (acartia tonsa) (ISO 14669 (1999) ISO 5667-16 (1998))
	>1,000 mg/l (daphnia magna) (OECD 202)
	>1,000 mg/l (pimephales promelas) (EPA-540/9-85-006)

##### 64-17-5 ethanol

LC50/96h	14,200 mg/l (pimephales promelas) (US EPA method E03-0)
	13,000 mg/l (oncorhynchus mykiss)
LC50/48h	5,012 mg/l (ceriodaphnia dubia) (ASTM E729-80)
	12,340 mg/l (daphnia magna)
EC50/48h	12,900 mg/l (algae)
	>10,000 mg/l (ceriodaphnia dubia) (DIN 38412 Teil 11)
	9,950 mg/l (crustaceans)
EC50/96h	12,900 mg/l (pimephales promelas) (US EPA method E03-0)
NOEC	2 mg/l /10d (ceriodaphnia dubia) (ECHA)
	250 mg/l /120h (danio rerio) (OECD 212)
ErC50	275 mg/l /72h (algae) (OECD 201)
ErCx 10%	11.5 mg/l /3d (algae) (OECD 201)
LC50	1,806 mg/l /10d (ceriodaphnia dubia) (ECHA)
	454 mg/l /9d (daphnia magna) (ECHA)

- **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 product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.

### 13 Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

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

(Contd. on page 6)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.07.2022

Version number 1.0

Revision: 29.07.2022

(Contd. of page 5)

· **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**

H225 Highly flammable liquid and vapour.  
H319 Causes serious eye irritation.

· **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  
Flam. Liq. 2: Flammable liquids – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

GB