

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.12.2018

Version number 1.0

Revision: 12.12.2018

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

- **1.1 Product identifier**
- **Trade name:** **KREUL Chalky Spray 200 ml**
- **Article number:** 76351, 76352, 76353, 76354, 76355, 76356
- **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  
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:** +44 (0)171 635 91 91

### 2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Aerosol 2 H223-H229 Flammable aerosol. Pressurised container: May burst if heated.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02

- **Signal word** Warning
- **Hazard statements**  
H223-H229 Flammable aerosol. Pressurised container: May burst if heated.
- **Precautionary statements**  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
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 spray.  
P271 Use only outdoors or in a well-ventilated area.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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### · 2.3 Other hazards

Vapours may form explosive mixtures with air. This material is combustible and can be ignited by heat, sparks, flames, or other sources of ignition (e.g. static electricity, pilot lights, or mechanical/ electrical equipment). Take precautionary measures against static discharges.

### · Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

### · 3.2 Chemical characterisation: Mixtures

- **Description:** Mixture of substances listed below with nonhazardous additions.

#### · Dangerous components:

CAS: 115-10-6 EINECS: 204-065-8 Index number: 603-019-00-8 Reg.nr.: 01-2119472128-37-XXXX	dimethyl ether	⚠ Flam. Gas 1, H220; Press. Gas C, H280	40-50%
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	20-25%

- **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:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.  
Seek immediate medical advice.
- **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. If symptoms persist, consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Administer medicinal carbon.  
A person vomiting while laying on their back should be turned onto their side.  
Seek immediate medical advice.
- **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**  
If swallowed or in case of vomiting, danger of entering the lungs.

## 5 Firefighting measures

### · 5.1 Extinguishing media

#### · Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### · For safety reasons unsuitable extinguishing agents: Water with full jet

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

In case of fire, the following can be released:

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

### · 5.3 Advice for firefighters

#### · Protective equipment:

- Wear self-contained respiratory protective device.
- Mouth respiratory protective device.

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- **Additional information** Cool endangered receptacles with water spray.

### 6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**

- Ensure adequate ventilation
- Use respiratory protective device against the effects of fumes/dust/aerosol.
- Keep away from ignition sources.
- Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:**

- Keep contaminated washing water and dispose of appropriately.
- Do not allow to enter sewers/ surface or ground water.
- Inform respective authorities in case of seepage into water course or sewage system.

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

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Send for recovery or disposal in suitable receptacles.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

- **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**

- Prevent formation of aerosols.
- Take note of emission threshold.
- Keep away from heat and direct sunlight.
- Ensure good ventilation/exhaustion at the workplace.

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

- Do not spray onto a naked flame or any incandescent material.
- Fumes can combine with air to form an explosive mixture.
- Keep ignition sources away - Do not smoke.
- Keep respiratory protective device available.
- Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

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

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

- Observe official regulations on storing packagings with pressurised containers.

- **Information about storage in one common storage facility:**

- Do not store together with oxidising and acidic materials.
- Do not store together with alkalis (caustic solutions).

- **Further information about storage conditions:**

- Store receptacle in a well ventilated area.
- Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- Keep container tightly sealed.

- **7.3 Specific end use(s)** See chapter 1.2.

### 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

- **115-10-6 dimethyl ether**

- |     |   |
|-----|---|
| WEL | Short-term value: 958 mg/m <sup>3</sup> , 500 ppm |
|     | Long-term value: 766 mg/m <sup>3</sup> , 400 ppm  |

- **64-17-5 ethanol**

- |     |  |
|-----|--|
| WEL | Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm |
|-----|--|

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### · DNELs

#### 64-17-5 ethanol

Oral	long-term exposure-systemic effects	87 mg/kg (general population)
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

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

### · Ingredients with biological limit values: -

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

### · 8.2 Exposure controls

#### · Personal protective equipment:

#### · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Do not eat, drink, smoke or sniff while working.

#### · Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Not necessary if room is well-ventilated.

#### · Protection of hands:

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.

#### · For the permanent contact gloves made of the following materials are suitable:

PVC or PE gloves

Value for the permeation: Level  $\leq$  8 h

Recommended thickness of the material:  $\geq$  - mm

#### · As protection from splashes gloves made of the following materials are suitable:

Butyl rubber, BR

Recommended thickness of the material:  $\geq$  0.4 mm

Value for the permeation: Level  $\leq$  120 - 240 min

#### · Eye protection: Safety glasses

#### · Body protection: Protective work clothing

## 9 Physical and chemical properties

### · 9.1 Information on basic physical and chemical properties

#### · General Information

#### · Appearance:

Form: Aerosol

Colour: According to product specification

· Odour: Specific type

· Odour threshold: Not determined.

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· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b>	
<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Not applicable, as aerosol.
· <b>Flash point:</b>	-36 °C
· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Ignition temperature:</b>	282 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Explosion limits:</b>	
<b>Lower:</b>	3.3 Vol %
<b>Upper:</b>	23.7 Vol %
· <b>Vapour pressure:</b>	Not determined.
· <b>Density at 20 °C:</b>	0.82 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not applicable.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	63.5 %
<b>VOC (EC)</b>	63.50 %
· <b>9.2 Other information</b>	No further relevant information available.

### 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**  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **10.5 Incompatible materials:** Keep away from oxidizing agents, strong alkaline and acidic materials.
- **10.6 Hazardous decomposition products:**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide

### 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### LD/LC50 values relevant for classification:

##### 64-17-5 ethanol

Oral	LD50	10470 mg/kg (rat)
Inhalative	LC50/4h	124.7 mg/l (rat)

- **Primary irritant effect:**
- **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.

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- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **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.

## 12 Ecological information

### 12.1 Toxicity

#### · Aquatic toxicity:

#### 115-10-6 dimethyl ether

LC50/96h	>4,000 mg/l (fish)
LC50/48h	>4,000 mg/l (daphnia magna)
EC50/96h	155 mg/l (algae)

- **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.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### · Recommendation

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

#### · European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
15 01 04	metallic packaging
HP 3	Flammable

#### · Uncleaned packaging:

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

### 14.1 UN-Number

#### · ADR, IMDG, IATA

UN1950

### 14.2 UN proper shipping name

#### · ADR

1950 AEROSOLS

#### · IMDG

AEROSOLS

#### · IATA

AEROSOLS, flammable

### 14.3 Transport hazard class(es)

#### · ADR



#### · Class

2 5F Gases.

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· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· 14.4 Packing group	
· ADR, IMDG, IATA	not regulated
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Gases.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· Transport category	2
· Tunnel restriction code	D
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

### 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.
- Seveso category P3a FLAMMABLE AEROSOLS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:
- Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57 -
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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### 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**

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

· **Department issuing SDS:** Product Safety Department

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

· **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)

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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases – Category 1

Aerosol 2: Aerosols – Category 2

Press. Gas C: Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

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