

Safety data sheet according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

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

- **1.1 Product identifier**
- **Trade name:** KREUL Leaf Metal Effect Spray Gold 400 ml
KREUL Leaf Metal Effect Spray Silver 400 ml
- **Article number:** 994400, 994401
- **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:** + 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**



Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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



- **Signal word** Danger
- **Hazard-determining components of labelling:**
acetone
n-butyl acetate
2-methoxy-1-methylethyl acetate
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Contd. on page 2)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 1)

- 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.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
 P501 Dispose of contents/container in accordance with regional regulations.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.
 Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.
 Buildup of explosive mixtures possible without sufficient ventilation.

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 9004-70-0 is only included in Silver.

CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49-XXXX	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	25-<50%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-XXXX	propane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	12.5-<20%
CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29-XXXX	n-butyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336, EUH066	12.5-<20%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	butane, pure ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	10-<12.5%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-xxxx	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226; ⚠ STOT SE 3, H336	5-<10%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27-XXXX	isobutane ⚠ Flam. Gas 1A, H220; Press. Gas (Comp.), H280	2.5-<5%
CAS: 9004-70-0	nitrocellulose solutions, with not more than 12.6% nitrogen, by dry mass, and not more than 55% nitrocellulose ⚠ Flam. Sol. 2, H228	2.5-<5%
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 %	<2.5%
CAS: 1330-20-7 EC number: 905-588-0 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32-XXXX	xylene ⚠ Flam. Liq. 3, H226; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	<2.5%

Additional information:

Benzene (EINECS 200-753-7) <0.1%. (Note P Annex VI to Directive (EC) No 1272/2008)

CAS 9004-70-0: GB CLP Note T

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; 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. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

(Contd. on page 3)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 2)

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:** CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**
Under certain fire conditions, traces of other toxic gases cannot be excluded.
- **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**
Ensure adequate ventilation
Use respiratory protective device against the effects of fumes/dust/aerosol.
Keep away from ignition sources.
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 section 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 alkalis (caustic solutions).
Do not store together with oxidising and acidic materials.
- **Further information about storage conditions:**
Keep container tightly sealed.
Store receptacle in a well ventilated area.
Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
- **Storage class:** 2B
- **7.3 Specific end use(s)** No further relevant information available.

GB
(Contd. on page 4)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 3)

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

67-64-1 acetone

WEL Short-term value: 3620 mg/m³, 1500 ppm
Long-term value: 1210 mg/m³, 500 ppm

123-86-4 n-butyl acetate

WEL Short-term value: 966 mg/m³, 200 ppm
Long-term value: 724 mg/m³, 150 ppm

106-97-8 butane, pure

WEL Short-term value: 1810 mg/m³, 750 ppm
Long-term value: 1450 mg/m³, 600 ppm
Carc (if more than 0.1% of buta-1.3-diene)

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm
Long-term value: 274 mg/m³, 50 ppm
Sk

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

1330-20-7 xylene

WEL Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGV

DNELs

67-64-1 acetone

Oral	chronic - systemic effect	62 mg/kg bw/d (general population)
Dermal	chronic - systemic effect	62 mg/kg bw/d (general population)
		186 mg/kg bw/d (worker)
Inhalative	acute - local effect	2,420 mg/m ³ (worker)
	chronic - systemic effect	200 mg/m ³ (general population)
		1,210 mg/m ³ (worker)

123-86-4 n-butyl acetate

Oral	acute - systemic effect	2 mg/kg bw/d (general population)
	chronic - systemic effect	2 mg/kg bw/d (general population)
Dermal	acute - systemic effect	6 mg/kg bw/d (general population)
		11 mg/kg bw/d (worker)
	chronic - systemic effect	6 mg/kg bw/d (general population)
		11 mg/kg bw/d (worker)
Inhalative	acute - systemic effect	300 mg/m ³ (general population)
		600 mg/m ³ (worker)
	acute - local effect	600 mg/m ³ (worker)
	chronic - local effect	35.7 mg/m ³ (general population)
		300 mg/m ³ (worker)
	chronic - systemic effect	35.7 mg/m ³ (general population)
		300 mg/m ³ (worker)

108-65-6 2-methoxy-1-methylethyl acetate

Oral	chronic - systemic effect	36 mg/kg bw/d (general population)
Dermal	chronic - systemic effect	320 mg/kg bw/d (general population)
		796 mg/kg bw/d (worker)
Inhalative	acute - local effect	550 mg/m ³ (worker)
	chronic - systemic effect	33 mg/m ³ (general population)
		275 mg/m ³ (worker)

64-17-5 ethanol

Oral	chronic - systemic effect	87 mg/kg bw/d (general population)
Dermal	chronic - systemic effect	206 mg/kg bw/d (general population)
		343 mg/kg bw/d (worker)
Inhalative	acute - local effect	950 mg/m ³ (general population)
		1,900 mg/m ³ (worker)
	chronic - systemic effect	114 mg/m ³ (general population)
		950 mg/m ³ (worker)

PNECs

67-64-1 acetone

freshwater	10.6 mg/l
marine water	1.06 mg/l

(Contd. on page 5)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 4)

sewage treatment plant (STP)	100 mg/l
freshwater sediment	30.4 mg/kg
marine sediment	3.04 mg/kg
soil	29.5 mg/kg
123-86-4 n-butyl acetate	
freshwater	0.18 mg/l
marine water	0.018 mg/l
sewage treatment plant (STP)	35.6 mg/l
freshwater sediment	0.981 mg/kg
marine sediment	0.0981 mg/kg
soil	0.0903 mg/kg
108-65-6 2-methoxy-1-methylethyl acetate	
water	6.35 mg/l
freshwater	0.635 mg/l
marine water	0.0635 mg/l
sewage treatment plant (STP)	100 mg/l
freshwater sediment	3.29 mg/kg
marine sediment	0.329 mg/kg
soil	0.29 mg/kg
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
marine sediment	2.9 mg/kg
soil	0.63 mg/kg
Ingredients with biological limit values:	
1330-20-7 xylene	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
1330-20-7 xylene	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

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

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

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

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A2/P3

· **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.

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

PVC or PE gloves

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

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

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

Butyl rubber, BR

Recommended thickness of the material: $\geq$ 0.3 mm

(Contd. on page 6)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 5)

Value for the permeation: Level $\leq$ 0.5-8 h· **Eye/face protection**

Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Physical state

Aerosol

· 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

Not applicable, as aerosol.

· Flammability

Not applicable.

· Lower and upper explosion limit

· Lower:

1.2 Vol % (123-86-4 n-butyl acetate)

· Upper:

13 Vol % (67-64-1 acetone)

· Flash point:

Not applicable, as aerosol.

· Auto-ignition temperature:

333 °C

· Decomposition temperature:

Not determined.

· pH

Not determined.

· Viscosity:

· Kinematic viscosity

Not determined.

· Dynamic:

Not determined.

· Solubility

· water:

Not miscible or difficult to mix.

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure at 20 °C:

2,100 hPa (106-97-8 butane, pure)

· Density and/or relative density

· Density at 20 °C:

~0.8 g/cm³

· Relative density

Not determined.

· Vapour density

Not determined.

· 9.2 Other information

· Appearance:

· Form:

Aerosol

· Important information on protection of health and environment, and on safety.

· Ignition temperature:

Product is not selfigniting.

· Explosive properties:

Explosive with or without contact with air.

· Solvent content:

· Organic solvents:

88.6 %

· VOC (EC)

88.6 %

· Change in condition

· Evaporation rate

Not applicable.

· Information with regard to physical hazard classes

· Explosives

Void

· Flammable gases

Void

· Aerosols

Extremely flammable aerosol. Pressurised container: May burst if heated.

· 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

GB

(Contd. on page 7)

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 6)

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:

67-64-1 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	>15,800 mg/kg (rabbit)
Inhalative	LC50/4h	76 mg/m ³ (rat)

123-86-4 n-butyl acetate

Oral	LD50	10,800 mg/kg (rat)
Dermal	LD50	>17,600 mg/kg (rabbit)
Inhalative	LC50/4h	>21 mg/m ³ (rat)

106-97-8 butane, pure

Inhalative	LC50/4h	658 mg/m ³ (rat)
------------	---------	-----------------------------

108-65-6 2-methoxy-1-methylethyl acetate

Oral	LD50	8,532 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat) (OECD 401) >5,000 mg/kg (rabbit)
Inhalative	LC50/4h	>10,000 mg/l (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 ³ (rat) (OECD 403)

1330-20-7 xylene

Oral	LD50	3,523 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rabbit)
Inhalative	LC50/4h	21.7 mg/m ³ (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **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**
May cause drowsiness or dizziness.
- **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:

67-64-1 acetone

LC50/96h	8,300 mg/l (fish)
	5,540 mg/l (oncorhynchus mykiss)
LC50/48h	8,450 mg/l (crustaceans)
EC50/96h	7,200 mg/l (algae)

123-86-4 n-butyl acetate

LC50/96h	81 mg/l (fish)
----------	----------------

(Contd. on page 8)

GB

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 7)

108-65-6 2-methoxy-1-methylethyl acetate

LC50/96h	180 mg/l (oncorhynchus mykiss)
EC50/48h	>500 mg/l (daphnia magna)
EbCx 10%	>1,000 mg/l (microorganisms)
EC50/21d	>100 mg/l (daphnia magna) (OECD 211)
ErC50/96h	>1,000 mg/l (pseudokirchneriella subcapitata)
LC50	63.5 mg/l (oryzias latipes) (OECD 204)
LOEC/96h	>1,000 mg/l (pseudokirchneriella subcapitata)
NOEC/48d	47.5 mg/l (oryzias latipes) (OECD 204)

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)

1330-20-7 xylene

LC50/96h	15.7 mg/l (fish)
LC50/48h	8.5 mg/l (crustaceans)

12.2 Persistence and degradability**108-65-6 2-methoxy-1-methylethyl acetate**

Carbon dioxide production	90 % /28d (OECD 301 F)
DOC removal	99 % /28d (OECD 301 F)
Oxygen consumption	83 % /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** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

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

14 Transport information**14.1 UN number or ID number**

· **ADR, IMDG, IATA** UN1950

14.2 UN proper shipping name

· **ADR** 1950 AEROSOLS
 · **IMDG** AEROSOLS
 · **IATA** AEROSOLS, flammable

(Contd. on page 9)

GB

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 8)

14.3 Transport hazard class(es)

ADR



· **Class** 2 5F Gases.
 · **Label** 2.1

IMDG, IATA



· **Class** 2.1 Gases.
 · **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.
 · **Hazard identification number (Kemler code):** -
 · **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.
 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.

· **Segregation Code**

· **14.7 Maritime transport in bulk according to IMO instruments** 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
- **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

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H228 Flammable solid.

(Contd. on page 10)

GB

Safety data sheet

according to UK REACH

Printing date 13.08.2025

Version number 1.9 (replaces version 1.8)

Revision: 13.08.2025

(Contd. of page 9)

H280 Contains gas under pressure; may explode if heated.
 H304 May be fatal if swallowed and enters airways.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H373 May cause damage to organs through prolonged or repeated exposure.
 EUH066 Repeated exposure may cause skin dryness or cracking.

· **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)

VOC: Volatile Organic Compounds (USA, EU)

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

ATE: Acute toxicity estimate values

Flam. Gas 1A: Flammable gases – Category 1A

Aerosol 1: Aerosols – Category 1

Press. Gas (Comp.): Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Flam. Sol. 2: Flammable solids – Category 2

Acute Tox. 4: Acute toxicity – Category 4

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

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

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

GB