



**EISspray**

Revision date: 16.03.2023

Product code: 00434-0192

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

EISspray

UFI: EH20-U0SM-0007-0KUU

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Use of the substance/mixture**

Cold spray for icing insects

**1.3. Details of the supplier of the safety data sheet**

Company name: FROWEIN GmbH & Co. KG

Street: Am Reislebach 83

Place: D-72461 Albstadt

Telephone: +49 (0) 74 32-956 - 0

Telefax: +49 (0) 74 32-956 - 138

Responsible Department: Responsible for the safety data sheet: sds@gbk-ingelheim.de

**1.4. Emergency telephone number:**

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)  
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Regulation (EC) No. 1272/2008

Aerosol 1; H222-H229

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

Regulation (EC) No. 1272/2008

Signal word: Danger

Pictograms:



**Hazard statements**

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

**Precautionary statements**

P102 Keep out of reach of children.

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.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**2.3. Other hazards**



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According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

In use, may form flammable/explosive vapour-air mixture.

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

**Chemical characterization**

Aerosol

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

Remove contaminated soaked clothing immediately.

If you feel unwell, seek medical advice.

**After inhalation**

Move to fresh air in case of accidental inhalation of vapours.

In the event of symptoms refer for medical treatment.

**After contact with skin**

Wash off immediately with plenty of water and soap for at least 15 minutes.

Consult a doctor if skin irritation persists.

In case of frostbite rinse with plenty of water. Don't remove clothing. In case of frostbite due to intensive contact, consult a doctor.

**After contact with eyes**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists, consult a specialist.

**After ingestion**

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

Never give anything by mouth to an unconscious person.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

**4.2. Most important symptoms and effects, both acute and delayed**

Inhalation of vapours in high concentration can cause narcotic effects.

Effects of breathing high concentrations of vapour may include: Headache, dizziness, weakness, unconsciousness.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptoms.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**



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**Suitable extinguishing media**

Alcohol-resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>), water-spray.  
Use fire fighting measures that suit the environment and products stored.

**Unsuitable extinguishing media**

Full water jet

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

Heating will cause pressure rise with risk of bursting.  
Fire may produce:  
carbon monoxide and carbon dioxide

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus and protective suit.

**Additional information**

Cool containers at risk with water spray jet.  
Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

**SECTION 6: Accidental release measures**

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

**General advice**

Ensure adequate ventilation, especially in confined areas.  
Keep away sources of ignition.  
Remove persons to safety.

**For non-emergency personnel**

Do not inhale gases.  
Avoid contact with skin, eyes and clothing.

**For emergency responders**

In case of vapour formation use respirator.  
Use personal protective clothing.

**6.2. Environmental precautions**

Do not discharge into the drains/surface waters/ground water.  
Do not discharge into the subsoil/soil.

**6.3. Methods and material for containment and cleaning up**

**For containment**

Ensure adequate ventilation, especially in confined areas.

**For cleaning up**

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Shovel into suitable container for disposal.  
Clean contaminated surface thoroughly.

**6.4. Reference to other sections**

Observe protective instructions (see Sections 7 and 8).  
Information for disposal see section 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Avoid contact with the skin and the eyes.  
In case of insufficient ventilation, especially in confined areas.



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Do not breathe vapours or spray mist.

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.  
Do not spray on a naked flame or any other incandescent material.  
Heating will cause pressure rise with risk of bursting.  
Formation of explosive gas mixtures in air.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed in a dry, cool and well-ventilated place.

**Hints on joint storage**

Incompatible with:  
oxidizing agents  
Acids and bases.

**Further information on storage conditions**

Keep away from food, drink and animal feeding stuffs.

**7.3. Specific end use(s)**

Cold spray for icing insects

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

**8.2. Exposure controls**

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas.

**Protective and hygiene measures**

Wash hands before breaks and immediately after handling the product.  
When using do not eat, drink or smoke.  
Take off immediately all contaminated clothing.  
Avoid contact with skin, eyes and clothing.  
Do not inhale aerosols

**Eye/face protection**

No eye / face protection normally required.  
In the event of risk of splashes are Protective goggles recommendable. [Tightly fitting goggles (EN 166).]

**Hand protection**

Protective gloves resistant to chemicals made off butyl, minimum coat thickness 0.7 mm, permeation resistance approx. 480 minutes, i.e. protective glove <Butoject 898> made by [www.kcl.de](http://www.kcl.de).  
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.  
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

**Skin protection**

Not required under normal use.



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**Respiratory protection**

No personal respiratory protective equipment normally required.

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type AX) (EN 14387).

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Aerosol
Colour:	Colourless
Odour:	Characteristic
pH-Value:	n.a.

**Changes in the physical state**

Melting point/freezing point:	n.d.
Boiling point or initial boiling point and boiling range:	n.a.
Sublimation point:	n.a.
Softening point:	n.a.

Flash point:	< 0 °C
Sustaining combustion:	Sustaining combustion

**Flammability**

Solid/liquid:	n.a.
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**Explosive properties**

The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.

Lower explosion limits:	1,5 g/m <sup>3</sup>
Upper explosion limits:	9,5 g/m <sup>3</sup>
Auto-ignition temperature:	n.d.

**Self-ignition temperature**

Solid:	n.a.
Gas:	n.a.

Decomposition temperature:	n.d.
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**Oxidizing properties**

Not oxidising.

Vapour pressure:	n.d.
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Density:	0,562 g/cm <sup>3</sup>
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Bulk density:	n.a.
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Water solubility: (at 20 °C)	Immiscible
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**Solubility in other solvents**

n.d.

Partition coefficient n-octanol/water:	n.d.
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Viscosity / dynamic:	n.d.
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Viscosity / kinematic:	n.d.
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Flow time:	n.d.
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Relative vapour density:	n.d.
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Evaporation rate:

n.d.

**9.2. Other information**

No data available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No decomposition if stored and applied as directed.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

Reactions with acids, alkalies and oxidizing agents

**10.4. Conditions to avoid**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on a naked flame or any other incandescent material.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**10.5. Incompatible materials**

oxidizing agents

Acids and bases.

**10.6. Hazardous decomposition products**

No hazardous decomposition products known.

Fire may produce:

Carbon monoxide and carbon dioxide

**SECTION 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.

No toxicological data available.

**ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

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.

**Additional information on tests**

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.



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**11.2. Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

Inhalation of vapours in high concentration can cause narcotic effects.

Effects of breathing high concentrations of vapour may include: Headache, dizziness, weakness, unconsciousness.

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecological data are not available.

**12.2. Persistence and degradability**

No data available

**12.3. Bioaccumulative potential**

No data available

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No data available

**Further information**

Do not flush into surface water or sanitary sewer system.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

**List of Wastes Code - residues/unused products**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**List of Wastes Code - contaminated packaging**

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

**Contaminated packaging**

Offer empty spray cans to an established disposal company.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number:**

UN 1950

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**14.2. UN proper shipping name:** AEROSOLS

**14.3. Transport hazard class(es):** 2

**14.4. Packing group:** -

Hazard label: 2.1



Classification code: 5F

Limited quantity: 1 L / 30 kg

Excepted quantity: E0

Transport category: 2

Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number:** UN 1950

**14.2. UN proper shipping name:** AEROSOLS

**14.3. Transport hazard class(es):** 2

**14.4. Packing group:** -

Hazard label: 2.1



Classification code: 5F

Limited quantity: 1 L / 30 kg

Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number:** UN 1950

**14.2. UN proper shipping name:** AEROSOLS

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

Hazard label: 2.1



Marine pollutant: No

Limited quantity: 1 L / 30 kg

Excepted quantity: E0

EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number:** UN 1950

**14.2. UN proper shipping name:** AEROSOLS, flammable

**14.3. Transport hazard class(es):** 2.1

**14.4. Packing group:** -

Hazard label: 2.1





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Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Handle in accordance with good industrial hygiene and safety practice.

**14.7. Maritime transport in bulk according to IMO instruments**

The transport takes place only in approved and appropriate packaging.

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40

2004/42/EC (VOC):	100 %
Information according to 2012/18/EU (SEVESO III):	P3a FLAMMABLE AEROSOLS

**National regulatory information**

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
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Water hazard class (D):	1 - slightly hazardous to water
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**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
IMDG = International Maritime Code for Dangerous Goods  
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization  
MARPOL = International Convention for the Prevention of Pollution from Ships  
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

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GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals  
CAS = Chemical Abstract Service  
EN = European norm  
ISO = International Organization for Standardization  
DIN = Deutsche Industrie Norm  
PBT = Persistent Bioaccumulative and Toxic  
vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose  
LC = Lethal concentration  
EC = Effect concentration  
IC = Median immobilisation concentration or median inhibitory concentration

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data

**Relevant H and EUH statements (number and full text)**

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

**Further Information**

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*