Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758. Issue date: 21/10/2025 Revision date: 21/10/2026 Version: 1.0

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

1.1: Product form / name

Product form: Fire suppression device

Product name: Zuff

1.2: Relevant identified use of the substance / mixture and use advice against

1.2.1 Relevant identified uses

Main use category Retail and commercial

Use of substance/mixture Fire protection

1.2.2 Use advised against

No additional information available:

1.3: Details of the supplier of the safety data sheet

Manufacturer

Zuff Fire GmbH Stollestr 22 01159 Dresden Germany

1.4: Emergency telephone number

Emergency number

Extra phrases

SECTION 2: Hazards identification

2.1: Classification of the substance or mixture

Adverse physicochemical, human health and environmental effects

No additional information available:

Unknown acute toxicity (CLP) - SDS

2.2: Label elements

Labeling according Regulation (EC) No. 1272/2008 (CLP) Extra labeling

Signal work (CLP) Warning

Hazard statements (CLP) P102 – Keep out of reach of children

P261 – Avoid breathing vapors

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if

present. Continue rinsing

P410+P412 – Protect from sunlight. Do not expose to

temperatures exceeding 50 °C / 122 °F

1.5915 % by mass of the contents are flammable

15.43% of the mixture consists of ingredient(s) of unkn

own acute toxicity (Dermal)

27.66% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours)

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2.3: Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition / information on ingredients

3.1: Substances

Not applicable

3.2: Mixtures			
Name	Product identifier	%	Classification according to regulation (EC= No. 1272/2008 (CLP)
Carbonic acid, monoammonium salt	(CAS-No.) 1066-33-7 (EC-No.) 213-911-5	10-20	Acute Tox. 4 (Oral), H302 (ATE=1576 mg/kg bodyweight)

SECTION 4: First aid measures

4.1: Description of fire aid measures

First-aid measures after inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in

a position comfortable for breathing. Get medical attention if

unwell.

First-aid measures after skin contact: If skin irritation occurs: Wash skin with plenty of water. Get

medical advice / attention if irritation persists.

First-aid measures after eye contact: If in eyes: Rinse cautiously with water for serval minutes, Remove

contact lenses if present. Continue rinsing. Get medical advice /

attention if irritation persists.

First-aid measures after ingestion: Do NOT induce vomiting unless directed to do so by medical person

nel. Never give anything by mouth to an unconscious person. Get

medical advice / attention if you feel unwell.

4.2: Most important symptoms and effects, bot acute and delayed

Symptoms/effects after inhalation: May cause irritation to the respiratory tract.

Symptoms/effects after skin contact: May cause skin irritation. Repeated exposure may cause skin dryness

or cracking

Symptoms/effects after eye contact: May cause eye irritation. Symptoms may include discomfort or pain,

excess blinking and tear production, with possible redness and

swelling.

Symptoms/effects after ingestion: May be harmful if swallowed. May cause gastrointestinal irritation, na

usea, vomiting and diarrhea.

4.3: Indiciation of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately.

SECTION 5: Firefighting measures

5.1: Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Do not use water jet.

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5.2: Special hazards arising from the substance or mixture

Fire hazard Product is an extinguishing media. It does not burn or support combus

tion. Products of combustion may include, and are not

limited to: oxides of carbon.

Explosion hazard Heat may build pressure, rupturing closed containers, spreading fire

and increasing risk of burns and injuries.

5.3: Advice for firefighters

Firefighting instructions In case of fire: Evacuate area. Fight fire remotely due to the risk of

explosion. Move containers away from the fire area if this can be done

without risk.

Protection during firefighting Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker

gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1: Personal precautions, protective equipment and emergency prodecures

General measures Use personal protection recommended in Section 8. Isolate the hazard

area and deny entry to unnecessary and unprotected personnel.

Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel No additional information available

6.1.2 For emergency responders No additional information available

6.2: Environmental precautions

Prevent entry to sewers and public waters

6.3: Methods and material for containment and cleaning up

For containment Stop leak if safe to do so. Remove all sources of ignition. Absorb and

/or contain spill with inert material (sand, vermiculite or

other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended

personal protective equipment.

Methods for cleaning up Sweep or shovel spills into appropriate container for disposal. Provide

ventilation.

6.4: Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1: Precautions for safe handling

Additional hazards when processed

Precautions for safe handling

Hazardous waste due to potential risk of explosion.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Avoid

contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray. Do not swallow. When using do not eat, drink or smoke. Handle and open container with care.

Hygiene measures Wash contaminated clothing before reuse. Always wash hands after

handling the product

7.2: Conditions for safe storage, including any incompatibilities

Storage conditions Keep out of the reach of children.

Protect from sunlight. Do not expose to temperatures exceeding 50

°C/ 122 °F. Store in a dry, cool and well-ventilated place

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7.3: Specific end use(s)

Fire protection

SECTION 8: Exposure controls/personal protection

8.1: Control parameters

Monitoring methods Consult the relevant monitoring standards for the region.

8.2: Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection: Chemical resistant gloves (according to European standard NF EN 374

or equivalent)

Eye protection: Safety eyewear complying with an approved standard such as

the European Standard EN166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid

splashes, mists or dusts.

Skin and body protection: Wear suitable protective clothing

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the

selected respirator.

No data available

Thermal hazard protection: Use personal protective equipment as required.

Environmental exposure controls: Avoid release to the environment.

Other information: Handle in accordance with good industrial hygiene and safety procedu

res. Do not eat, drink or smoke when using this product

SECTION 9: Physical and chemical properties

9.1: Information on basic physical and chemical properties

Physical state Liquid

Colour

Odour

No data available

Relative evaporation rate

Melting point

No data available

No data available

Merezing point

Minus 5 °C

Boiling point No data available Flash point No data available Auto-ignition temperature No data available Decomposition temperature No data available Not flammable Flammability (solid, gas) No data available Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available Solubility No data available Partition coefficient n-octanol/water No data available Viscosity, kinematic No data available Viscosity, dynamic No data available No data available Explosive properties Oxidising properties No data available

Explosive limits

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9.2: Other information

No additional information available

SECTION 10: Stability and reactivity

10.1: Reactivity

No dangerous reactions known under normal conditions of use.

10.2: Chemical stability

Stable under normal conditions. Do not drill or burn even after use.

10.3: Possibility of hazardous reactions

No dangerous reactions known under normal conditions for use.

10.4: Conditions to avoid

Heat

10.5: Incompatible matierals

None known

10.6: Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1: Information on toxicological effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified.

Not classified.

Carbonic acid, monoammonium salt (1066-33-7)

LD50 oral rat	1576 mg/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OE CD Guideline 434 (Acute Dermal Toxicity - Fixed Dose Procedure)
LD50 dermal rabbit	> 5000 mg/kg

Unknown acute toxicity (CLP) - SDS 15.43% of the mixture consists of ingredient(s) of unknown acute toxic

ity (Dermal)

27.66% of the mixture consists of ingredient(s) of unknown acute

toxicity (Inhalation (Vapours))

Skin corrosion/irritation Not classified.

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

Serious eye damage/irritation Not classified.

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

Respiratory or skin sensitization Not classified.

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

Germ cell mutagenicity Not classified.

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

Carcinogenicity Not classified.

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

Reproductive toxicity Not classified.

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

STOT-single exposure Not classified.

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

STOT-repeated exposure Not classified.

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

Aspiration hazard Not classified.

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

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SECTION 12: Ecological information

12.1: Toxicity

Ecology - general May cause long-term adverse effects in the aquatic environment.

Hazardous to the aquatic Not classified

environment, short- term (acute)

Hazardous to the aquatic Not classified

environment, long-term (chronic)

Carbonic acid, monoammonium salt (1066-33-7)

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LC50 - Fish [1]	0.16 – 1.1 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
LC50 - Fish [2]	0.615 – 0.712 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 - Crustacea [1]	202 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	145.6 mg/l Test organisms (species): other

-2.4 (at 25 °C)

12.2: Persistence and degradability

Persistence and degradability Not established

Bioaccumulative potential

Bioaccumulative potential Not established

Carbonic acid, monoammonium

salt (1066-33-7)

Partition coefficient n-octanol/water

Diethylene glycol monobutyl ether (1

12-34-5)

BCF - Fish [1] (no bioconcentration expected)

12.4: Mobility in soil

No additional information available

Results of PBT and vPVB assessment 12.5:

No additional information available

12.6: Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Waste treatment methods

Product/Packaging disposal Dispose in a safe manner in accordance with local/national regulations. recommendations

The generation of waste should be avoided or minimized wherever

possible.

Additional information No additional information

SECTION 14: Transport information

14.1: **UN** number

UN-No. (ADR) Not applicable UN-No. (IMDG) Not applicable UN-No. (IATA) Not applicable

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14.2: HS customs tariff code

8424.10.00-00

SECTION 15: Regulatory information

15.1: Safety, health and environmental regulations/legislation specific for the substance

EU regulations

Contains no REACH substances with Annex XVII restrictions

Contains no REACH candidate substance. Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no REACH Annex XIV substances

National regulations Not determined

15.2: Chemical safety assessment

No chemical safety assessment has been carried out

Disclaimer

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