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

1.1 Product identifier

Trade name: Zinkstaub

UFI: 0N5Y-GE6T-V20Y-FJ20

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

General use: Corrosion protection agent. Coating material. Varnish.
Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company name: WEKEM GmbH
Street/POB-No.: Emilie-Winkelmann-Str. 2
Postal Code, city: 59192 Bergkamen
Germany
WWW: www.wekem.de
E-mail: vertrieb@wekem.de
Telephone: +49 (0) 23 89 40 30-10
Telefax: +49 (0) 23 89 40 30-111

Department responsible for information:
Product Safety Department:
Telephone: +49 (0) 23 89 40 30-10
E-mail: vertrieb@wekem.de

1.4 Emergency telephone number

GIZ-Nord, Göttingen
Telephone: +49 (0)551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Aerosol 1; H222; H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Skin Irrit. 2; H315	Causes skin irritation.
Eye Irrit. 2; H319	Causes serious eye irritation.
STOT SE 3; H336	May cause drowsiness or dizziness.
STOT RE 2; H373	May cause damage to organs through prolonged or repeated exposure.
Asp. Tox. 1; H304	May be fatal if swallowed and enters airways.
Aquatic Acute 1; H400	Very toxic to aquatic life.
Aquatic Chronic 1; H410	Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (CLP)

Signal word: **Danger**

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements:

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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection.
P312	Call a POISON CENTER/doctor if you feel unwell.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling

Text for labelling:

Contains:
n-Butyl acetate
Acetone
Reaction mass of ethylbenzene and m-xylene
Hydrocarbons, C9, aromatics

2.3 Other hazards

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.
Special danger of slipping by leaking/spilling product.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Blend of active ingredients with propellant

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 231-175-3 CAS 7440-66-6	Zinc powder-zinc dust (stabilized) Aquatic Acute 1; H400. Aquatic Chronic 1; H410.	25 - 50 %
REACH 01-2119485493-29-xxxx EC No. 204-658-1 CAS 123-86-4	n-Butyl acetate Flam. Liq. 3; H226. STOT SE 3; H336. (EUH066).	10 - 25 %
REACH 01-2119471330-49-xxxx EC No. 200-662-2 CAS 67-64-1	Acetone Flam. Liq. 2; H225. Eye Irrit. 2; H319. STOT SE 3; H336. (EUH066).	10 - 25 %
REACH 01-2119488216-32-xxxx list no. 905-588-0 CAS -	reaction mass of ethylbenzene and xylene Flam. Liq. 3; H226. Acute Tox. 4; H312. Acute Tox. 4; H332. Skin Irrit. 2; H315. Eye Irrit. 2; H319. STOT SE 3; H335. STOT RE 2; H373. Asp. Tox. 1; H304. Specific concentration limits (SCL): STOT RE 2; H373: C ≥ 10 %	2,5 - 10 %
REACH 01-2119455851-35-xxxx list no. 918-668-5 CAS 64742-95-6	Hydrocarbons, C9, aromatics Flam. Liq. 3; H226. STOT SE 3; H335, H336. Asp. Tox. 1; H304. Aquatic Chronic 2; H411. (EUH066).	2,5 - 10 %
REACH 01-2119980079-27-xxxx EC No. 484-470-6 CAS 623-40-5	2-Pentanone oxime Acute Tox. 4; H302. Eye Irrit. 2; H319. Aquatic Chronic 3; H412.	< 1 %
REACH 01-2119485395-27-xxxx EC No. 200-857-2 CAS 75-28-5	Isobutane, pure Flam. Gas 1; H220. Press. Gas (Comp.); H280.	10 - 25 %
REACH 01-2119485394-21-xxxx EC No. 200-827-9 CAS 74-98-6	Propane Flam. Gas 1; H220. Press. Gas (Comp.); H280.	2,5 - 10 %

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection!
Take off contaminated clothing and wash it before reuse.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth and seek medical attention immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Causes serious eye irritation. Causes skin irritation. May be fatal if swallowed and enters airways.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

water spray jet, Extinguishing powder, foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container: May burst if heated.
May form dangerous gases and vapours in case of fire.
Furthermore, there may develop: Metal oxide smoke, carbon monoxide and carbon dioxide.
Vapours can form explosive mixtures with air.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information: Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.
Move undamaged containers from immediate hazard area if it can be done safely.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Do not allow fire water to penetrate into surface or ground water.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing mist/vapours/spray. Avoid contact with the substance.
If possible, eliminate leakage. In case of leakage, eliminate all ignition sources. Provide adequate ventilation.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

6.2 Environmental precautions

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

6.3 Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Avoid breathing mist/vapours/spray. Provide adequate ventilation, and local exhaust as needed. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

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

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Store containers in upright position.

Hints on joint storage: Do not store together with: Oxidizing agents, strong acids, strong bases, Halogenated compounds, Ethanolamine, hydrogen peroxide.
Do not store together with highly inflammable or combustible materials.
Keep away from food, drink and animal feedingstuffs.

Storage class: 2B = aerosol dispensers and lighters

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7440-66-6	Zinc powder-zinc dust (stabilized)	Germany: DFG Kurzzeit	0,4 mg/m³ (compounds, inorganic; respirable fraction)
		Germany: DFG Kurzzeit	4 mg/m³ (compounds, inorganic; inhalable fraction)
		Germany: DFG Langzeit	0,1 mg/m³ (compounds, inorganic; respirable fraction)
		Germany: DFG Langzeit	2 mg/m³ (compounds, inorganic; inhalable fraction)
123-86-4	n-Butyl acetate	Europe: IOELV: STEL	723 mg/m³; 150 ppm
		Europe: IOELV: TWA	241 mg/m³; 50 ppm
		Germany: TRGS 900 Kurzzeit	600 mg/m³; 124 ppm
		Germany: TRGS 900 Langzeit	300 mg/m³; 62 ppm
67-64-1	Acetone	Europe: IOELV: TWA	1.210 mg/m³; 500 ppm
		Germany: TRGS 900 Kurzzeit	2.400 mg/m³; 1.000 ppm
		Germany: TRGS 900 Langzeit	1.200 mg/m³; 500 ppm
64742-95-6	Hydrocarbons, C9, aromatics	Germany: TRGS 900 Kurzzeit	100 mg/m³ (hydrocarbons, aromatic, C9-C14)
		Germany: TRGS 900 Langzeit	50 mg/m³ (hydrocarbons, aromatic, C9-C14)
75-28-5	Isobutane, pure	Germany: TRGS 900 Kurzzeit	9.600 mg/m³; 4.000 ppm
		Germany: TRGS 900 Langzeit	2.400 mg/m³; 1.000 ppm
74-98-6	Propane	Germany: TRGS 900 Kurzzeit	7.200 mg/m³; 4.000 ppm
		Germany: TRGS 900 Langzeit	1.800 mg/m³; 1.000 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-64-1	Acetone	Germany: TRGS 903, urine	50 mg/L creatinine	acetone	end of exposure or end of shift

DNEL/DMEL:

Information about Acetone:
DNEL workers, long-term, systemic, inhalative: 1.210 mg/m³
DNEL workers, long-term, local, inhalative: 2.420 mg/m³
DNEL workers, long-term, systemic, dermal: 186 mg/kg bw/d
DNEL consumers, long-term, systemic, inhalative: 200 mg/m³
DNEL consumers, long-term, systemic, dermal: 62 mg/kg bw/d
DNEL consumers, long-term, systemic, oral: 62 mg/kg bw/d

Information about n-Butyl acetate:
DNEL workers, long-term, systemic, inhalative: 300 mg/m³
DNEL workers, short-term, systemic, inhalative: 600 mg/m³
DNEL workers, long-term, local, inhalative: 300 mg/m³
DNEL workers, short-term, local, inhalative: 600 mg/m³
DNEL workers, long-term, systemic, dermal: 11 mg/kg bw/d
DNEL workers, short-term, systemic, dermal: 11 mg/kg bw/d

Information about reaction mass of ethylbenzene and xylene:
DNEL workers, short-term, inhalative: 442 mg/m³
DNEL workers, long-term, dermal: 212 mg/kg bw/d
DNEL workers, long-term, inhalative: 221 mg/m³
DNEL consumers, short-term, inhalative: 260 mg/m³
DNEL consumers, long-term, dermal: 125 mg/kg bw/d
DNEL consumers, long-term, inhalative: 65,3 mg/m³
DNEL consumers, long-term, oral: 12,5 mg/kg bw/d

Information about Hydrocarbons, C9, aromatics:
DNEL workers, inhalative, systemic, long-term: 151 mg/m³
DNEL workers, dermal, systemic, long-term: 12,5 mg/kg bw/d
DNEL consumers, inhalative, systemic, long-term: 32 mg/m³
DNEL consumers, dermal, systemic, long-term: 7,5 mg/kg bw/d
DNEL consumers, oral, systemic, long-term: 7,5 mg/kg bw/d

PNEC:

Information about Zinc powder-zinc dust (stabilized):
PNEC water (freshwater): 14,4 µg/L
PNEC water (marine water): 7,2 µg/L
PNEC sewage treatment plant: 100 µg/L
PNEC sediment (freshwater): 146,9 mg/kg dw
PNEC sediment (marine water): 162,2 mg/kg dw
PNEC soil: 83,1 mg/kg dw

Information about Acetone:
PNEC water (freshwater): 10,6 mg/L
PNEC water (marine water): 1,06 mg/L
PNEC sewage treatment plant: 100 mg/L
PNEC sediment (freshwater): 30,4 mg/kg dw
PNEC sediment (marine water): 3,04 mg/kg dw
PNEC soil: 29,5 mg/kg dw

Information about n-Butyl acetate:
PNEC water (freshwater): 0,18 mg/L
PNEC water (marine water): 0,018 mg/L
PNEC water (intermittent release): 0,36 mg/L
PNEC sewage treatment plant: 35,6 mg/L
PNEC sediment (freshwater): 0,981 mg/kg dw
PNEC sediment (marine water): 0,098 mg/kg dw
PNEC soil: 0,09 mg/kg dw

Information about reaction mass of ethylbenzene and xylene:
PNEC Water (freshwater): 0,327 mg/L
PNEC Water (marine water): 0,327 mg/L
PNEC Sediment (freshwater): 12,46 mg/kg dw
PNEC Sediment (marine water): 12,46 mg/kg dw
PNEC Soil: 2,31 mg/kg dw
PNEC Sewage treatment plant: 6,58 mg/L

Information about Hydrocarbons, C9, aromatics:
PNEC water (freshwater): 0,044 mg/L
PNEC water (marine water): 0,004 mg/L
PNEC sediment (freshwater): 2,52 mg/kg dwt
PNEC sediment (marine water): 0,252 mg/kg dwt
PNEC soil: 0,852 mg/kg dwt
PNEC sewage treatment plant: 1,6 mg/L

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection:

Respiratory protection must be worn whenever the WEL levels have been exceeded.
Recommendation: Use combination filter type A2-P2 according to EN 14387.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection: Protective gloves according to DIN EN ISO 374-1.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to DIN EN ISO 16321-1.

Body protection: Flame retardant, antistatic and chemical resistant protective clothing.

General protection and hygiene measures:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing mist/vapours/spray.
Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.
Do not get in eyes, on skin, or on clothing.
When using do not eat or drink. Contaminated work clothing should not be allowed out of the workplace.
Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid Form: Aerosol
Colour:	grey
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	Extremely flammable aerosol.
Upper/lower flammability or explosive limits:	LEL (Lower Explosion Limit): 1,86 Vol-% UEL (Upper Explosive Limit): 14,30 Vol-%
Flash point/flash point range:	No data available
Decomposition temperature:	No data available
pH:	No data available
Viscosity, kinematic:	No data available
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	1,792 g/mL (Liquid)
Vapour density:	No data available
Particle characteristics:	Not applicable

9.2 Other information

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Solvent content:	67 %

Evaporation rate: No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Extremely flammable aerosol.
Vapours can form explosive mixtures with air.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Pressurised container: May burst if heated.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

10.5 Incompatible materials

Oxidizing agents, strong acids, strong bases, Halogenated compounds, Ethanolamine, hydrogen peroxide.

10.6 Hazardous decomposition products

No dangerous reactions with proper and specified storage and handling

Thermal decomposition: No data available

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects:

The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.
ATE: > 2.000 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.

Serious eye damage/irritation: Eye Irrit. 2; H319 = Causes serious eye irritation.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

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

Germ cell mutagenicity/Genotoxicity: 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.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): STOT SE 3; H336 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): STOT RE 2; H373 = May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Asp. Tox. 1; H304 = May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties:

No data available

Other information:

Information about Acetone:
LD50, oral, Rat: > 5.800 mg/kg (OECD 401)
LC50, inhalative, Rat: > 76 mg/L/4h
LD50, dermal, Rabbit: > 15.800 mg/kg

Information about n-Butyl acetate:
LD50 Rat, oral: 13.100 mg/kg
LD50 Rabbit, dermal: > 5.000 mg/kg
LC50 Rat, inhalative > 21 mg/L/4h

Information about Hydrocarbons, C9, aromatics:
LD50, oral, Rat: > 2.000 mg/kg
LD50, dermal, Rat: > 2.000 mg/kg

Information about 2-Pentanone oxime:
LD50, Rat, oral: 1133 mg/kg

Symptoms

In case of inhalation:
May cause drowsiness or dizziness. cough, sneeze, shortage of breath.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
In case of ingestion: abdominal pain, nausea, vomiting and Diarrhoea.
After contact with skin: Irritates skin and mucous membranes. itching, redness, pain.
After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Very toxic to aquatic life with long lasting effects.

Information about n-Butyl acetate:
Algae toxicity:
EC50 Desmodesmus subspicatus (green algae): 647,7 mg/L/72h.
Bacterial toxicity:
EC50 Tetrahymena pyriformis: 356 mg/L/40h.
Daphnia toxicity:
EC50 Daphnia magna (Big water flea): 44 mg/L/48 h.
Fish toxicity:
LC50 Pimephales promelas (fathead minnow) 18 mg/L/96h.

Information about Acetone:
Fish toxicity: LC50 Oncorhynchus mykiss: 5.540 mg/L/96h
LC50 Alburnus alburnus (alburnum): 11.000 mg/L/96h
Daphnia toxicity: LC50 Daphnia pulex (water flea): 8.800 mg/L/48h
LC50 Artemia salina: 2.100 mg/L/24h
Algae toxicity: NOEC Prorocentrum minimum: 430 mg/L/96h
LOEC Microcystis aeruginosa: 530 mg/L/8d

Information about Hydrocarbons, C9, aromatics:
Fish toxicity: LC50 Oncorhynchus mykiss: 9,2 mg/L/96h
Daphnia toxicity: EL50 Daphnia magna (Big water flea): 3,2 mg/L/48h
Algae toxicity: ELr50 Pseudokirchneriella subcapitata (green algae): 2,9 mg/L/72h

Water Hazard Class: 2 = obviously hazardous to water (self-classified)

12.2 Persistence and degradability

Further details: Information about Acetone:
Biodegradability: 91 %/28d . Easily bio-degradable

Information about Hydrocarbons, C9, aromatics:
Biodegradability: 78 %/28d . Easily bio-degradable.

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 16 05 04* = Gases in pressure containers (including halons) containing hazardous substances
* = Evidence for disposal must be provided.

Recommendation: Do not pierce or burn, even after use.
Special waste. Dispose of waste according to applicable legislation.
Do not dispose of with household waste.

Package

Waste key number: 15 01 11* = metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers
* = Evidence for disposal must be provided.

Recommendation: Dispose of waste according to applicable legislation.
Empty carefully and completely, if possible. Handle empty containers with care.
Incineration may cause explosion.

Section 14. Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:
UN 1950

14.2 UN proper shipping name

ADR/RID, ADN, IMDG: UN 1950, AEROSOLS
IATA-DGR: UN 1950, AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

ADR/RID, ADN:	Class 2, Code: 5F
IMDG:	Class 2.1, Subrisk -
IATA-DGR:	Class 2.1

14.4 Packing group

ADR/RID, ADN, IATA-DGR:	not applicable
IMDG:	-

14.5 Environmental hazards

Dangerous for the environment:	Substance/mixture is environmentally hazardous according to the criteria of the UN model regulations.
Marine pollutant - IMDG:	yes
Marine pollutant - ADN:	yes

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board:	RID: Hazard identification number 23, UN number UN 1950
Hazard label:	2.1
Special Provisions:	190 327 344 625
Limited quantities:	1 L
EQ:	E0
Package - Instructions:	P207 LP200
Package - Special Provisions:	PP87 RR6 L2
Special provisions for packing together:	MP9
Tunnel restriction code:	D

Inland waterway craft (ADN)

Hazard label:	2.1
Special Provisions:	190 327 344 625
Limited quantities:	1 L
EQ:	E0
Equipment necessary:	PP - EX - A
ventilation:	VE01,VE04

Sea transport (IMDG)

EmS:	F-D, S-U
Special Provisions:	63 190 277 327 344 381 959
Limited quantities:	1000 mL
Excepted quantities:	E0
Package - Instructions:	P207, LP200
Package - Provisions:	PP87, L2
IBC - Instructions:	-
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	-
Tank instructions - Provisions:	-
Stowage and handling:	SW1 SW22
Segregation:	SG69
Properties and observations:	-
Segregation group:	none

Air transport (IATA)

Hazard label:	Flamm. gas
Excepted Quantity Code:	E0
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special Provisions:	A145 A167 A802
Emergency Response Guide-Code (ERG):	10L

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - Germany

Storage class: 2B = aerosol dispensers and lighters

Water Hazard Class: 2 = obviously hazardous to water (self-classified)

Major Accident Ordinance (12. BImSchV):

Physical hazards: Number 1.2.3.1 = Code P3a,
Quantity threshold 150 000 kg / 500 000 kg
Environmental hazards: Number 1.3.1 = Code E1,
Quantity threshold 100 000 kg / 200 000 kg

Technical guidance air: 5.2.5

Information on working limitations:

Observe employment restrictions for young people.
Observe employment restrictions for expectant or nursing mothers.

Further regulations, limitations and legal requirements:

The product is not subject to the Chemicals Prohibition Ordinance (ChemVerbotsV).

National regulations - EC member states

Volatile organic compounds (VOC):

67 % by weight / 636 g/L

Labelling of packaging with <= 125mL content

Signal word: **Danger**

Hazard statements:

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements:

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.

Further regulations, limitations and legal requirements:

Product: Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: refer to Germany, 12. BImSchV
Use restriction according to REACH annex XVII, no.: 3, 40, 75

Acetone: Regulation (EU) 2019/1148 (marketing and use of explosives precursors): listed
REGULATION (EC) 273/2004 (Drug precursors): Category 3
REGULATION (EC) 111/2005 (Trade with drug precursors): Category 3

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H220 = Extremely flammable gas.
H222 = Extremely flammable aerosol.
H225 = Highly flammable liquid and vapour.
H226 = Flammable liquid and vapour.
H229 = Pressurised container: May burst if heated.
H280 = Contains gas under pressure; may explode if heated.
H302 = Harmful if swallowed.
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.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H411 = Toxic to aquatic life with long lasting effects.
H412 = Harmful to aquatic life with long lasting effects.
EUH066 = Repeated exposure may cause skin dryness or cracking.

Reason of change: Changes in section 8: Occupational exposure limit values

Date of first version: 11.8.2023

Department issuing data sheet:

see section 1: Department responsible for information

Abbreviations and acronyms:

Acute Tox.: Acute toxicity
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
Aerosol: Aerosol
Aquatic Acute: Hazardous to the aquatic environment - acute
Aquatic Chronic: Hazardous to the aquatic environment - chronic
AS/NZS: Australian Standards/New Zealand Standards
Asp. Tox.: Aspiration toxicity
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EC50: Effective Concentration 50%
EL50: Effective loading rate 50%
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities
EU: European Union
Eye Irrit.: Eye irritation
Flam. Gas: Flammable gases
Flam. Liq.: Flammable liquid
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
LC50: Median lethal concentration
LD50: Lethal dose 50%
LEL: Lower Explosion Limit
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
NOEC: No Observed Effect Concentration
OECD: Organisation for Economic Co-operation and Development
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
Press. Gas: Gases under pressure
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
Skin Irrit.: Skin irritation
STOT RE: Specific target organ toxicity - repeated exposure
STOT SE: Specific target organ toxicity - single exposure
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.