

**Safety data sheet pursuant to ordinance
(EC) No. 453/2010
(EC) No. 1907/2006 (REACH)**

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Cimco-Werkzeugfabrik
Carl Jul. Müller GmbH & Co. KG

1. DESIGNATION OF THE MATERIAL OR MIXTURE AND COMPANY NAME

1.1 Product identifier

Product name Zinc spray Art. No. **151100**
Trade name Zinc spray Art. No. **151100**
CAS No.
EC No.

1.2 Relevant identified use of material or mixture and uses that are not advisable

Recommended
limitations of the
application

Use of the
material/mixture Technical aerosols

1.3 Details on the supplier who is making the safety data sheet available

Company Cimco Werkzeugfabrik Carl Jul. Müller GmbH & Co. KG
Hohenhagener Straße 1 - 5
D-42855 Remscheid, Germany
+49 (0) 21913718-01 Fax: +49 (0) 21913718-86

1.4 Emergency number **Emergency CONTACT (24-Hour-Number)**
GBK GmbH +49 (0)6132-84463

2. POSSIBLE HAZARDS

2.1 Classification of the material

- **Classification in accordance with the directive (EC) No. 1272/2008 [CLP/GHS]**
Aerosol 1 H222, H229,
Aquatic Chronic 2 H411

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2.2 Label elements

- Labelling according to directive (EC) No. 1272/2008 [CLP/GHS]



GHS02



GHS09

Signal word:

Hazard

Hazard warnings:

H222 Extremely inflammable aerosol.
H229 Pressurised container: could burst if heated.
H411 Toxic for water organisms, with long-term effects.

Safety information:

P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames, and other sources of ignition. Do not smoke.
P211 Do not spray against open flames or other sources of ignition.
P251 Do not puncture or incinerate, even after use.
P273 Avoid releasing into the environment.
P410 + P412 Protect against direct sunlight and do not expose to temperatures above 50°C.
P501 Dispose of content/container as problem waste.

2.3 Other dangers

The product has a narcotic effect.

Results of the PBT and vPvB assessment

- **PBT:** The materials in the mixture do not meet the PBT/vPvB criteria according to REACH, Appendix XIII.
- **vPvB:** not applicable

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3. COMPOSITION / INFORMATION ON COMPONENTS

Constituents	EC No.	CAS No.	Concentrate [% by weight]
Acetone	200-662-2	67-64-1	3 < 10 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOTSE 3, H336
Ethyl-benzene	202-849-4	100-41-4	< 10 Flam. Liq. 2, H225 Acute Tox. 4, H332
Aluminium powder (stabilised)	231-072-3	7429-90-5	< 10 Water-react. 2, H261 Flam. Sol. 1, H228
Zinc powder - zinc dust (stabilised)	231-175-3	7440-66-6	10 < 20 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Dimethyl ether	204-065-8	115-10-6	50 ≤ 100 Flam. Gas 1, H220 Compressed gas
n-butyl-acetate	204-658-1	123-86-4	< 10 Flam. Liq. 3, H226 STOT SE 3, H336
Ethyl acetate	205-500-4	141-78-6	3 < 10 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Xylene	215-535-7	1330-20-7	5 < 10 Flam. Liq. 3, H226 Acute Tox. 4, H332 / Acute Tox. 4, H312 Skin Irrit. 2, H315

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4. FIRST AID MEASURES

4.1 Description of first aid measures

General information

Remove dirty, saturated clothing immediately.

After inhaling

Move the affected person into the fresh air and place in a resting position.
In the event of complaints, seek medical assistance.

After skin contact

In the event of skin contact, wash off with soap and water.
In the event of long-term skin irritation, consult doctor.

After swallowing

Do not induce vomiting
Seek medical assistance.

After eye contact

In the event of contact with the eyes, rinse thoroughly with lots of water and consult a doctor.

4.2 Important symptoms and effects which are acute or occur with a delay

No information is available.

4.3 Indication of any immediate medical attention and special treatment needed

No information is available.

5. FIREFIGHTING MEASURES

5.1 Extinguishing agents

Suitable extinguishing agents

Alcohol-resistant foam, carbon dioxide, dry sand

Unsuitable extinguishing agents

Water

5.2 Particular risks associated with the material or mixture

Formation of explosive/highly flammable vapour-air mixtures is possible.
Danger of bursting.

5.3 Information on fire fighting

Special protective equipment for firefighting:

In the presence of combustion or carbonization gases, any firefighting, rescue and clearing up activities should be undertaken only with heavy-duty respiratory protection.

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Further information:

Vapours are heavier than air and spread on the ground.

Cool endangered containers with water spray jet.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. MEASURES IN THE EVENT OF ACCIDENTAL RELEASE

6.1 Person-related safety precautions, protective equipment and procedures to be followed in emergencies

Ensure sufficient ventilation.

Use personal protective clothing.

Keep ignition sources away.

Use breathing protection if subject to the effects of vapours/dust/aerosol.

Note spreading of gas, especially on the ground (heavier than air) and in wind direction.

6.2 Environmental protection measures

If surface water or sewage system are contaminated, inform the responsible authorities.

Do not allow to enter the sewage system or ground water.

6.3 Methods and material for containment and cleaning

Absorb with suitable liquid-binding materials.

Dispose of the absorbed material in accordance with the regulations.

6.4 References to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protective equipment: see section 8

7. HANDLING AND STORAGE

7.1 Safety measures for safe handling

Information on safe handling

Ensure good room ventilation, extraction at the workplace where necessary.

Take measures to protect against electrostatic charges.

General protection measures

Avoid contact with the eyes and skin.

Do not inhale gases / vapours / aerosols.

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Hygiene measures	Do not smoke, eat, drink or sniff while working. Wash hands before breaks and after finishing work.
Information on fire and explosion protection	Keep away from ignition sources – Do not smoke. Do not spray onto flames or incandescent materials. Pressurised container. Do not force open or incinerate after use Together with air, vapours can form an explosive mixture. Avoid exposure to heat. Use explosion-protected equipment/fittings and spark-free tools.

7.2 Conditions for safe storage taking incompatibilities into consideration

Storage requirements	Keep sealed in original packaging. The local authority regulations for storage of aerosol dispensers are to be observed.
Information on storage with other products	
Further information on storage conditions	Protect against heat and direct sunlight. The storage temperature must not exceed 50 °C. Keep container in a cool, well-ventilated place.

Storage class

7.3 Specific end use

See section 1.2

8. LIMITATION AND MONITORING OF EXPOSURE / PERSONAL PROTECTIVE EQUIPMENT

8.1 Limit values

CAS No.	Designation	Type	[mg/m3]	[ppm]	Peak limit	Note
67-64-1	Acetone	8 hours	1200	500	2(I)	DFG,EU
115-10-6	Dimethyl ether	8 hours	1900	1000	8(II)	DFG,EU
141-78-6	Ethyl acetate	8 hours	1500	400	2(I)	DFG,Y
100-41-4	Ethylbenzene	8 hours	88	20	2(II)	DFG,H,Y
1330-20-7	Xylene (all isomers)	8 hours	440	100	2(II)	DFG,EU,H

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Occupational exposure limit values

CAS No.	Designation	Type	[mg/m ³]	[ppm]	Note
100-41-4	Ethyl-benzene	8 hours	442	100	skin
		Briefly	884	200	
115-10-6	Dimethyl ether	8 hours	1920	1000	skin
1330-20-7	Xylene, all isomers, pure	8 hours	224	50	
		Briefly	442	100	
67-64-1	Acetone	8 hours	1210	500	

Biological limit values

CAS No.	Designation	Parameters	BLV	Material examined	Time sample taken
100-41-4	Ethyl-benzene	Mandelic acid + phenylglyoxalic acid	300 mg/l	U	B
1330-20-7	Xylene (all isomers)	Xylene	1.5 mg/l	B	b
1330-20-7	Xylene (all isomers)	Methylhippuric (toluic) acid (all isomers)	2000 mg/l	U	b

Additional information

National and local legal provisions must be adhered to.

8.2 Limiting and monitoring exposure
Personal protective equipment

General protective and hygiene measures

The usual regulations for handling chemicals needs to be adhered to.

Do not breathe in dust/smoke/mist. Keep away from food, drink and animal feed. Do not smoke, eat or drink while working. Avoid contact with the eyes and skin. Wash hands before a break and after finishing work.

Respiratory protection

If ventilation is inadequate, wear breathing apparatus. Briefly: filtration device, filter AX, otherwise breathing apparatus with independent air supply.

Hand protection

It is recommended to clarify the chemical resistance of the above-mentioned protective gloves for special applications with the glove manufacturer.

The type of chemical protection gloves is to be selected according to the concentration and quantity of hazardous materials at the specific workplace.

Information on glove material [kind/type, thickness, penetration time/wearing period, wetting resistance]: butyl rubber; 0.7 mm; 480 min.

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Eye protection	Tight fitting safety glasses
Personal protection	Protective workwear
Limiting and monitoring environmental exposure	Sufficient ventilation.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on the basic physical and chemical properties

Form	aerosol
Colour	silver-grey
Odour	solvent-containing
Steam pressure	- na -
Relative density	- na -
Melting point / Freezing point	- na -
Explosive properties	- na -
Self-ignition temperature	- na -
Ignition point	- na -
Flammability	- na -
Oxidizing properties	- na -
Solubility in / miscibility with	- na -
Ignition temperature	- na -
Solvent content	- na -
Solids content	- na -

9.2 Other information

No information is available.

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10. STABILITY AND REACTIVITY

10.1 Reactivity

None.

10.2 Chemical stability

No information is available.

10.3 Possible hazardous reactions

Possible hazardous reactions.

10.4 Conditions to be avoided

Avoid exposure to heat.
Formation of explosive gas mixtures with air.

10.5 Incompatible materials

No information is available.

10.6 Dangerous decomposition processes

No decomposition when used as intended.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

	Value/Evaluation	Species	Method	Note
LD50 acute oral	> 2000 mg/kg	Rat		Data refers to the main components.
LD50 acute dermal	1000 mg/kg			Xylene
LC50 acute If inhaled	>5 mg/l (4 h)	Rat		Aluminium
Skin irritation	irritant			
Eye irritation	irritant			

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Practical experience

Frequent and prolonged contact with the skin can dry out the skin, which can lead to skin complaints and inflammation (dermatitis).

Irritating to the respiratory system.

Irritates the eyes and skin.

General comments

The product is to be handled with the care usual when handling chemicals.

Other hazardous characteristics can not be ruled out.

12. ENVIRONMENTAL INFORMATION

12.1 Toxicity

No information is available.

12.2 Persistence and degradability

No additional information is available.

12.3 Bio accumulation potential

No additional information is available.

12.4 Mobility in the soil

No additional information is available.

12.5 Results of PBT and vPvB assessment

PBT Not applicable

vPvB Not applicable

12.6. Other harmful effects

Toxic for water organisms, with long-term effects.

Do not allow uncontrolled release of the product into the environment.

The product must not enter water systems.

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13. INFORMATION ON DISPOSAL

Recommendation For correct waste disposal, empty the spray completely.

Product Dispose of in accordance with local authority regulations.

Waste code 08 01 11* Paint and lacquer waste which contains organic solvents or other hazardous materials.

Waste marked with an asterisk (*) are classed as hazardous waste according to Directive 2008/98/EC on hazardous waste.

Unclean packaging Dispose of in accordance with local authority regulations.

14. INFORMATION ON TRANSPORT

	ADR/RID	IMDG	IATA-DGR
14.1 UN number	1950	1950	1950
14.2 Proper UN shipping name	COMPRESSED GAS PACKAGING	AEROSOLS (ZINC POWDER)	Aerosols, inflammable
14.3 Transport hazard class	2.1	2.1	2.1
14.4 Packaging group	-	-	-
14.5 Environmental hazards	Yes	Yes	Yes

14.6 Special preventive measures for the user

No information is available.

14.7 Bulk transport according to Appendix II of the MARPOL agreement 73/78 and according to the IBC code

Not applicable

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Transport by land ADR/RID

Danger label 2.1
Tunnel restriction code D
Classification code 5F
Transport as "Limited quantity" as per section 3.4 ADR

15. STATUTORY REGULATIONS

15.1 Regulations on safety, health and environmental protection / specific legal regulations for the material or the mixture

VOC guideline

Note

Daten separat anfragen / Request data separately.

National regulations:

Information on employment restrictions

The national laws regarding employment restrictions are to be observed.

Water hazard class 2 VwVwS Annex 4
Water-polluting

Incident ordinance: Incident ordinance, Appendix I: part 1: No. 8 and 9b.

15.2 Chemical safety assessment

A chemical safety assessment for materials in this mixture have not been carried out.

16. OTHER INFORMATION

Recommended use and restrictions

Existing national and local laws regarding chemicals are to be observed.
Nur für den gewerblichen Gebrauch. / For industrial use only.

Further information

The information given is based on our current level of knowledge and serves to describe the product in terms of the safety precautions to be taken. It does not represent an assurance of properties of the product described.

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- H220 Extremely flammable gas.
- H225 Liquid and vapour highly flammable.
- H226 Liquid and vapour flammable.
- H228 Flammable solid.
- H261 Contact with water generates flammable gases.
- H312 Hazardous to health upon skin contact.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Hazardous to health if inhaled.
- H336 May cause drowsiness and dizziness.
- H400 Extremely toxic for water organisms.
- H410 Extremely toxic for water organisms, with long-term effects.