

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

Print date: 10.07.2015

page 1

Revised:10.07.2015

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 "light" Art. No. **151102**
Trade name Zinc spray "light" Art. No. **151102**
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,
Eye Irrit. 2 H319
STOT SE 3 H336
Aquatic Chronic 2 H411

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

Print date: 10.07.2015

page 2

Revised:10.07.2015

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

2.2 Label elements

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



GHS02



GHS07



GHS09

Signal word:

Hazard

Hazard warnings:

H222	Extremely inflammable aerosol.
H229	Pressurised container: could burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness and dizziness.
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.
P261	Avoid breathing in dust/smoke/gas/mist/vapour/aerosol.
P264	Wash hands thoroughly after use.
P271	Only use outdoors or in well ventilated rooms.
P273	Avoid releasing into the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P340	IN THE EVENT OF INHALATION: Move the person into fresh air and ensure they can breathe unrestrictedly.
P305 + P351 + P338	IN THE EVENT OF CONTACT WITH THE EYES: Rinse carefully with water for several minutes. Remove any contact lenses being worn if possible. Continue rinsing
P312	In the event of feeling unwell, call the POISON CONTROL CENTRE/doctor.
P337 + P313	In the event of sustained eye irritation: Consult a doctor/seek medical attention.

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

Print date: 10.07.2015

page 3

Revised:10.07.2015

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

P403 + P233	Keep container tightly sealed in a well ventilated place.
P405	Keep locked away.
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

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
Butane-1-ol	200-751-6	71-36-3	1 < 3 Flam. Liq. 3, H226 Acute Tox. 4, H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam.1, H318 STOT SE 3, H336
Ethyl-benzene	202-849-4	100-41-4	< 10 Flam. Liq. 2, H225 Acute Tox. 4, H332
Zinc powder - zinc dust (stabilised)	231-175-3	7440-66-6	2.5 < 10 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

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

Print date: 10.07.2015

page 4

Revised:10.07.2015

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

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
Naphtha (crude oil), heavy hydrogen-treated	265-150-3	64742-48-9	1 < 10 Flam. Liq. 3, H226 Asp. Tox. 1, H30 STOT SE 3, H336 EUH066
Aluminium powder (desensitised)	231-072-3	7429-90-5	< 10

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.

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

Print date: 10.07.2015

page 5

Revised:10.07.2015

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

5. FIREFIGHTING MEASURES

5.1 Extinguishing agents

Suitable extinguishing agents Alcohol-resistant foam, carbon dioxide, dry sand, extinguishing powder

Unsuitable extinguishing agents Water

5.2 Particular risks associated with the material or mixture

Danger of bursting.

5.3 Information on fire fighting

Special protective equipment for firefighting:

Use breathing apparatus with independent air supply.

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

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.

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

Print date: 10.07.2015

page 6

Revised:10.07.2015

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

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.

Additional information

Sort out non-tight cans and dispose of according to 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	Extraction in enclosed spaces at floor height. 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.
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. The product is inflammable. Together with air, vapours can form an explosive mixture. Avoid exposure to heat.

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	Do not store with inflammable substances.

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

Print date: 10.07.2015

page 7

Revised:10.07.2015

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

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.
Store in a cool place, heating leads to increases in pressure and
a risk of bursting.

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/m ³]	[ppm]	Peak limit	Note
67-64-1	Acetone	8 hours	1200	500	2(I)	DFG,EU
71-36-3	Butane-1-ol	8 hours	310	100	1(I)	DFG,Y
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	Ethyl- benzene	8 hours	88	20	2(II)	DFG,H,Y
1330-20-7	Xylene (all isomers)	8 hours	440	100	2(II)	DFG,EU,H

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	

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

Print date: 10.07.2015

page 8

Revised:10.07.2015

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

Biological limit values

CAS No.	Designation	Parameters	BLV	Material examined	Time sample taken
67-64-1	Acetone	Acetone	80 mg/l	U	b
71-36-3	Butanol-1-ol (butanol)	Butanol-1-ol (1- butanol) (after hydrolysis)	2 mg/g Creatinine	U	d
71-36-3	Butanol-1-ol (1-butanol)	Butanol-1-ol (1- butanol) (after hydrolysis)	300 mg/l	U	b
100-41-4	Ethyl-benzene	Mandelic acid + phenylglyoxalic acid	300 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.

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.

Eye protection

Tight fitting safety glasses

Personal protection

Protective workwear

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

Print date: 10.07.2015

page 9

Revised:10.07.2015

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

Limiting and monitoring environmental exposure

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

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	0.81 g/cm ³
Melting point / Freezing point	- na -
Explosive properties	- na -
Self-ignition temperature	- na -
Ignition point	> 55 °C
Flammability	- na -
Oxidizing properties	- na -
Solubility in / miscibility with	- na -
Ignition temperature	- na -
Solvent content	- na -
Solids content	- na -

9.2 Other information

Vapours are heavier than air.

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

Print date: 10.07.2015

page 10

Revised:10.07.2015

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

10. STABILITY AND REACTIVITY

10.1 Reactivity

None

10.2 Chemical stability

No information is available.

10.3 Possible hazardous reactions

None

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		zinc
LD50 acute dermal	1100 mg/kg		Conversion value of acute toxicity	Xylene
LC50 acute If inhaled	5.41 mg/l (4 h)	Rat		zinc
Skin irritation	not irritating			
Eye irritation	Irritant - risk of serious eye damage.			

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

Print date: 10.07.2015

page 11

Revised:10.07.2015

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

Practical experience

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

The product can cause irreversible damage to eyes.

Inhalation has a narcotic/intoxicating effect.

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

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

The product must not enter water systems.

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

Print date: 10.07.2015

page 12

Revised:10.07.2015

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

13. INFORMATION ON DISPOSAL

Recommendation	For correct waste disposal, empty the spray completely.
Product	Dispose of in accordance with local authority regulations. There are no uniform regulations for the disposal of chemicals or residual materials in the member states of the EU. In Germany, the requirement to recycle is codified by the "Kreislaufwirtschafts- und Abfallgesetz (KrWG)" (Recycling and Waste Management Act).
Waste code	15 01 10* packaging which contains residues of hazardous substances or is contaminated by hazardous substances 16 05 04* gases containing hazardous substances (including halons) in pressurised containers
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.

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

Print date: 10.07.2015

page 13

Revised:10.07.2015

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

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

Not applicable

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

Observe employment restrictions for young people.

The national laws regarding employment restrictions are to be observed.

Water pollution class 2 Self-classification as per VwVwS of 15.05.1999 Appendix
Water-polluting

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.

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

Print date: 10.07.2015

page 14

Revised:10.07.2015

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

EUH066	Repeated contact can cause rough or cracked skin.
H220	Extremely inflammable gas.
H225	Liquid and vapour highly inflammable.
H226	Liquid and vapour inflammable.
H302	Hazardous to health if swallowed.
H304	Can be fatal if swallowed or if it enters the respiratory tract.
H312	Hazardous to health upon skin contact.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Hazardous to health if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness and dizziness.
H400	Extremely toxic for water organisms.
H410	Extremely toxic for water organisms, with long-term effects.