



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

1.1. Product identifier

Name of product

Zinc Spray bright grade
Code-Nr. 110010

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

Recommended intended purpose(s)

Technical Aerosols

1.3. Details of the supplier of the safety data sheet

Distributor

WEICON GmbH & Co. KG
Königsberger Str. 255, DE-48157 Münster
Postbox 48045, DE-8460 Münster
Phone ++49(0)251 / 9322 - 0, Fax ++49(0)251 / 9322 - 244
E-Mail : msds@weicon.de
Internet : www.weicon.de

Advice

Produktsicherheit / Product-Safety-Department
Phone ++49(0)251 / 9322 - 0
E-mail (competent person):
msds@weicon.de

1.4. Emergency telephone number

GIZ Bonn (German, English) Tel: ++49(0)228-19 240
TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178
433 7434 (24h Emergency Contact)

Manufacturer

WEICON GmbH & Co. KG
Königsberger Str. 255, DE-48157 Münster

1.4. Emergency telephone number

Emergency advice

-
Phone -
GIZ Bonn (Medizinische Auskunft in Deutsch und Englisch)
Tel: ++49(0)228-19 240
TRANSPORT: Consultank Lutz Harder GmbH Tel: +49(0)178
433 7434 (24h Emergency Contact)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Aerosol 1	H222, H229
Eye Irrit. 2	H319
STOT SE 3	H336
Aquatic Chronic 2	H411

Hazard Statements

H222	Extremely flammable aerosol.
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H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]



GHS02



GHS07



GHS09

Signal word

Danger

Hazard Statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

Product has an anesthetic effect.

Information pertaining to special dangers for human and environment

In extensive use, formation of flammable / explosive vapour-air mixture is possible.

Results of PBT and vPvB assessment

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

**Zinc Spray bright grade****! SECTION 3: Composition/ information on ingredients****3.1. Substances**

not applicable

3.2. Mixtures**Description**

Zinc spray based on synthetic resin binder, solvent and pigments.

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
67-64-1	200-662-2	acetone	3 < 10	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336
71-36-3	200-751-6	butan-1-ol	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
100-41-4	202-849-4	ethylbenzene	< 10	Flam. Liq. 2, H225 / Acute Tox. 4, H332 / STOT RE 2, H373 (hearing organs) / Asp. Tox. 1, H304
7429-90-5	231-072-3	aluminium powder (stabilised)	1 < 10	Water-react. 2, H261 / Flam. Sol. 1, H228
7440-66-6	231-175-3	zinc powder - zinc dust (stabilized)	2,5 < 10	Aquatic Acute 1, H400 / Aquatic Chronic 1, H410
115-10-6	204-065-8	dimethylether	50 < 70	Flam. Gas 1, H220 / Press. Gas
123-86-4	204-658-1	n-butyl acetate	< 10	Flam. Liq. 3, H226 / STOT SE 3, H336
141-78-6	205-500-4	ethyl-acetate	3 < 10	Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336
68308-64-5	269-662-8	Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	0,1 < 0,25	Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Aquatic Acute 1, H400
64742-48-9	265-150-3	Naphtha (petroleum), hydrotreated heavy	1 < 10	Asp. Tox. 1, H304
1330-20-7	215-535-7	xylene	5 < 10	Flam. Liq. 3, H226 / STOT RE 2, H373 / Asp. Tox. 1, H304 / Acute Tox. 4, H312, H332 / Skin Irrit. 2, H315 / Eye Irrit. 2, H319 / STOT SE 3, H335

REACH

CAS No	Name	REACH registration number
64742-48-9	Naphtha (petroleum), hydrotreated heavy	01-2119463258-33
1330-20-7	xylene	01-2119488216-32-xxxx

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.

In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with soap and water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Do not induce vomiting.

Refer to medical treatment.



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

No information available.

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

No information available.

! SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam

Dry powder

Carbon dioxide

Dry sand

Unsuitable extinguishing media

water

5.2. Special hazards arising from the substance or mixture

May lead to formation of explosive/easily ignitable vapour air mixtures.

Danger of bursting

In case of fire formation of dangerous gases possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus.

Additional information

Vapours are heavier than air and will spread on the ground.

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

! SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

Use breathing apparatus if exposed to vapours/dust/aerosol.

Pay attention to extension of gas especially at ground (heavier than air) and in direction of the wind.

6.2. Environmental precautions

Inform pollution control authorities if product gets into the sewerage systems or open waters.

Do not discharge into the drains or bodies of water..

Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, kieselguhr, acid binder, general-purpose binder, sawdust).

After taking up the material dispose according to regulation.

! Additional Information

Sort out leaky cans and dispose according to regulations.



6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

! SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ventilate closed rooms at ground level.

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Take measures against electrostatically charging.

! General protective measures

Avoid contact with eyes and skin

Do not inhale aerosols

Ensure sufficient ventilation.

! Hygiene measures

At work do not eat, drink, smoke or take drugs.

Remove soiled or soaked clothing immediately.

Work in rooms with good ventilation.

Wash hands before breaks and after work.

! Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

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

Pressurized container.

Do not pierce or burn even after use.

Vapours can form an explosive mixture with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in closed original container.

Adhere to administrative regulations relating to storage of compressed gas cylinders / containers.

! Advice on storage compatibility

Do not store together with animal feedstuffs.

Do not store together with food.

! Further information on storage conditions

Store at +5 till +25 °C.

Protect from heat and direct solar radiation.

Storage temperature may not exceed 50°C (=122°F).

Store container at cool and aired place.

7.3. Specific end use(s)

Recommendation(s) for intended use

See section 1.2

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Ingredients with occupational exposure limits to be monitored

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
67-64-1	Acetone	8 hours	1210	500	EH40/2005
		Short-term	3620	1500	



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Ingredients with occupational exposure limits to be monitored (continued)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
7429-90-5	Aluminium metal: inhalable dust	8 hours	10		EH40/2005
7429-90-5	Aluminium metal: respirable dust	8 hours	4		EH40/2005
71-36-3	butan-1-ol	8 hours			EH40/2005
		Short-term	154	50	
115-10-6	Dimethyl ether	8 hours	766	400	EH40/2005
		Short-term	958	500	
141-78-6	Ethyl acetate	8 hours		200	EH40/2005
		Short-term		400	
100-41-4	Ethylbenzene	8 hours	441	100	EH40/2005
		Short-term	552	125	
1330-20-7	Xylene, o-, m-, p- or mixed isomers	8 hours	220	50	EH40/2005
		Short-term	441	100	

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m3]	[ppm]	Remark
100-41-4	ethylbenzene	8 hours	442	100	skin
		Short-term	884	200	
115-10-6	dimethylether	8 hours	1920	1000	
67-64-1	acetone	8 hours	1210	500	

DNEL-/PNEC-values

DNEL worker

CAS No	Substance name	Value	Code	Remark
123-86-4	n-butyl acetate	480 mg/m3	DNEL long-term inhalative (systemic)	
		480 mg/m3	DNEL long-term inhalative (local)	
		960 mg/m3	DNEL acute inhalative (systemic)	
		960 mg/m3	DNEL acute inhalative (local)	
1330-20-7	xylene	289 mg/m3	DNEL acute inhalative (local)	
		289 mg/m3	DNEL acute inhalative (systemic)	
		77 mg/m3	DNEL long-term inhalative (systemic)	
		180 mg/kg	DNEL long-term dermal (systemic)	
141-78-6	ethyl-acetate	734 mg/m3	DNEL long-term inhalative (local)	
		63 mg/kg	DNEL long-term dermal (systemic)	
		1468 mg/m3	DNEL acute inhalative (local)	
		1468 mg/m3	DNEL acute inhalative (systemic)	
64742-48-9	Naphtha (petroleum), hydrotreated heavy	300 mg/kg	DNEL long-term dermal (systemic)	
		900 mg/m3	DNEL long-term inhalative (systemic)	
		300 mg/kg	DNEL long-term dermal (systemic)	
71-36-3	butan-1-ol	55 mg/m3	DNEL long-term inhalative (local)	
		310 mg/m3	DNEL long-term inhalative (local)	
7440-66-6	zinc powder - zinc dust (stabilized)	83 mg/kg	DNEL long-term dermal (systemic)	



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DNEL-/PNEC-values (continued)

CAS No	Substance name	Value	Code	Remark
		5 mg/m3	DNEL long-term inhalative (systemic)	

PNEC

CAS No	Substance name	Value	Code	Remark
123-86-4	n-butyl acetate	0,18 mg/l	PNEC aquatic, freshwater	
		0,981 mg/kg	PNEC sediment, freshwater	
		0,018 mg/l	PNEC aquatic, marine water	
1330-20-7	xylene	12,46 mg/kg	PNEC sediment, marine water	
		0,327 mg/l	PNEC aquatic, marine water	
		0,327 mg/l	PNEC aquatic, freshwater	
		2,31 mg/kg	PNEC sediment, freshwater	
		12,46 mg/kg	PNEC sediment, freshwater	
141-78-6	ethyl-acetate	1,15 mg/kg	PNEC sediment, freshwater	
		0,24 mg/l	PNEC aquatic, freshwater	
		0,024 mg/l	PNEC aquatic, marine water	
		0,115 mg/kg	PNEC sediment, marine water	
67-64-1	acetone	3,04 mg/kg	PNEC sediment, marine water	
		1,06 mg/l	PNEC aquatic, marine water	
		30,4 mg/kg	PNEC sediment, freshwater	
		10,6 mg/l	PNEC aquatic, freshwater	
71-36-3	butan-1-ol	0,082 mg/l	PNEC aquatic, freshwater	
		0,0178 mg/kg	PNEC sediment, marine water	
		0,0082 mg/l	PNEC aquatic, marine water	
		0,178 mg/kg	PNEC sediment, freshwater	
7440-66-6	zinc powder - zinc dust (stabilized)	0,0206 mg/l	PNEC aquatic, freshwater	
		117,8 mg/kg	PNEC sediment, freshwater	
		0,0061 mg/l	PNEC aquatic, marine water	
		56,5 mg/kg	PNEC sediment, marine water	

Additional advice

The statutory local and national regulations have to be observed.

8.2. Exposure controls

! Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.

Breathing apparatus in the event of aerosol or mist formation.

Short-term: filter apparatus, filter AX/P2, otherwise environment-independent breathing apparatus.

Hand protection

In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Chemical protective gloves must be chosen carefully in view of their design and depending on the dependence on the concentration and amounts of dangerous goods used in the specific working tasks.

Glove material specification [make/type, thickness, permeation time/life, wetting resistance]: butyl rubber, 0,7mm; 480min

**Zinc Spray bright grade****Eye protection**

tightly fitting goggles

Other protection measures

protective clothing

Appropriate engineering controls

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

! SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

aerosol

Colour

silver-grey

Odour

solvent-like

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not determined				
boiling point	-24 °C				
melting point	not determined				
Flash point	-42 °C				
Vapourisation rate	not determined				
Flammable (solid)	not determined				
Flammability (gas)	not determined				
Ignition temperature	> 200 °C				estimate
Self ignition temperature					The product is not self-igniting.
Lower explosion limit	3 Vol-%				
Upper explosion limit	18,6 Vol-%				
Vapour pressure	not determined				
Relative density	0,81 g/cm ³				
Vapour density	not determined				
Solubility in water					immiscible
Solubility/other	not determined				
Partition coefficient n-octanol/water (log P O/W)	not determined				



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	Value	Temperature	at	Method	Remark
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Decomposition temperature	not determined				
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Viscosity dynamic	not applicable				
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Viscosity kinematic	not applicable				
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Oxidising properties

No information available.

Explosive properties

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

9.2. Other information

No information available.

! SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

No information available.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep away from heat.

Formation of explosive gas/air mixtures.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

Thermal decomposition

Remark	No decomposition if used as directed.
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! SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 2000 mg/kg			ATE
LD50 acute dermal	> 2000 mg/kg			ATE
LC50 acute inhalation	> 5 mg/l (4 h)		dust/mist	ATE



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	Value/Validation	Species	Method	Remark
Skin irritation	low irritant effect - not necessary to label			
Eye irritation	irritant			
Skin sensitization	non-sensitizing			

Subacute Toxicity - Carcinogenicity

	Value	Species	Method	Validation
Mutagenicity				No experimental information on genotoxicity in vivo available.
Reproduction-Toxicity				No indications of toxic effects were observed in reproduction studies in animals.
Carcinogenicity				No indications of carcinogenic effects are available from long-term trials.

! Specific target organ toxicity (single exposure)

May cause drowsiness or dizziness.

! Experiences made from practice

Often and long skin contact may cause degreasing and desiccation of the skin which may cause skin irritation.
Inhalation causes narcotic effect/intoxication.

! Additional information

The product is to be handled with the caution usual with chemicals.

Other hazardous properties may not be excluded.

The product has not been tested. The information is derived from the properties of the individual components.

! SECTION 12: Ecological information

12.1. Toxicity

No information available.

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

The product has not been tested. Because of the product's consistency and low solubility in water bioavailability is not likely.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

! General regulation

Do not allow uncontrolled leakage of product into the environment.

Product is not allowed to be discharged into the ground water or aquatic environment.

Product is not allowed to be discharged into aquatic environment.

The ecotoxic effect of the product has not been tested. The information on this is given on the basis of details in the literature.



! SECTION 13: Disposal considerations

13.1. Waste treatment methods

! Waste code No.

16 05 04*

Name of waste

gases in pressure containers (including halons) containing hazardous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC on hazardous waste.

! Recommendations for the product

Remove in accordance with local official regulations.

Dispose of as hazardous waste.

Recommendations for packaging

Dispose of according to the local waste regulations.

! General information

For proper waste disposal a complete emptying of the tin is necessary.

Assignment to a waste code number / waste identification according to the EWC is to be carried out on a sector or process-specific basis.

! SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	1950	1950	1950
14.2. UN proper shipping name	AEROSOLS	AEROSOLS (ZINC POWDER)	Aerosols, flammable
14.3. Transport hazard class(es)	2.1	2.1	2.1
14.4. Packing group	-	-	-
14.5. Environmental hazards	Yes	Yes	Yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

Land and inland navigation transport ADR/RID

Hazard label(s) 2.1

tunnel restriction code D

Classification code 5F

transport in "limited quantities" according to 3.4 ADR is possible

Marine transport IMDG

MARINE POLLUTANT

Transport as limited quantities according to 3.4 IMDG Code is possible.



! SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****VOC standard****VOC content** 82,2 %**VOC value** 669,5 g/L**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

For industrial use only.

Further information

Each user is responsible for the implementation of the national special regulations.

The information contained herein is based on the state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.

Please observe the following disclaimer! --- Our safety data sheets have been compiled according to effective EU-directives, WITHOUT taking into account the special national directives concerning the handling of hazardous substances.

Indication of changes: "!" = Data changed compared with the previous version. Previous version: 8.3

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312,	-?-
H332	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
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 (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.