

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Zinc Spray

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

Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

Company name:	ITW LLC & Co. KG	
Street:	Mühlackerstrasse 147	
Place:	D-75417 Mühlacker	
Telephone:	++49(0)7041-96340	Telefax: ++49(0)7041-963429
e-mail:	info@itwcp.de	
Internet:	www.itwcp.de	
Responsible Department:	Produktsicherheit	

1.4. Emergency telephone number: ++49(0)7041-96340
Mo. - Do. 8.00 - 16.30 Fr. 8.00 - 14.00

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Directive 67/548/EEC or 1999/45/EC**

Indications of danger: F+ - Extremely flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment

R phrases:

Extremely flammable.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Repeated exposure may cause skin dryness or cracking.

Vapours may cause drowsiness and dizziness.

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

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Very toxic to aquatic life with long lasting effects.

2.2. Label elements**Hazardous components which must be listed on the label**

Acetone, Hydrocarbons, aromatic C9

Signal word:

Danger

Pictograms:

GHS02-GHS07-GHS09

**Hazard statements**

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 2 of 10

- | | |
|------|---|
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H410 | Very toxic to aquatic life with long lasting effects. |

Precautionary statements

- | | |
|----------------|--|
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P251 | Do not pierce or burn, even after use. |
| P211 | Do not spray on an open flame or other ignition source. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P102 | Keep out of reach of children. |
| P101 | If medical advice is needed, have product container or label at hand. |

Special labelling of certain mixtures

- | | |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking.
Ohne ausreichende Lüftung Bildung explosionsfähiger Gemische möglich. Buildup of explosive mixtures possible without sufficient ventilation. |
|--------|---|

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 3 of 10

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
231-175-3	zinc powder - zinc dust (stabilized)	
7440-66-6	N - Dangerous for the environment R50-53	25-50%
030-001-01-9	Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1 (M-Factor = 1); H400 H410	
200-857-2	isobutane	
75-28-5	F+ - Extremely flammable R12	10-25%
601-004-00-0	Flam. Gas 1; H220	
200-662-2	acetone; propan-2-one; propanone	
67-64-1	F - Highly flammable, Xi - Irritant R11-36-66-67	10-25%
606-001-00-8	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066	
200-827-9	propane	
74-98-6	F+ - Extremely flammable R12	10-25%
601-003-00-5	Flam. Gas 1; H220	
215-535-7	xylene	
1330-20-7	Xn - Harmful, Xi - Irritant R10-20/21-38	5-10%
601-022-00-9	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315	
203-448-7	butane	
106-97-8	F+ - Extremely flammable R12	5-10%
601-004-00-0	Flam. Gas 1; H220	
918-668-5	Hydrocarbons, C9, aromatics	
		5-10%
	Flam. Liq. 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H304 H411	
01-2119455851-35		
202-849-4	ethylbenzene	1-5%
100-41-4	F - Highly flammable, Xn - Harmful R11-20-48/20-65	
601-023-00-4	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

After contact with skin, wash immediately with: Water. Change contaminated clothing.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 4 of 10

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

No data available

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

No data available

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**Carbon dioxide (CO₂). Foam. Extinguishing powder.**Unsuitable extinguishing media**

Water with tenside additive. Water.

5.2. Special hazards arising from the substance or mixture

Combustible. Vapours may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard.

6.3. Methods and material for containment and cleaning up

Ventilate affected area.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition. - No smoking.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition.
- No smoking.**Advice on storage compatibility**

Do not store together with: Material, rich in oxygen, oxidizing.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 5 of 10

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

DIN EN 374 Tested protective gloves are to be worn: Butyl rubber. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Protective clothing:

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

Physical state:	Aerosol
Colour:	grey
Odour:	characteristic

Test method**Changes in the physical state**

Initial boiling point and boiling range: -0,5 °C

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 6 of 10

Flash point:	<0° °C
Lower explosion limits:	1,4 vol. %
Upper explosion limits:	14,3 vol. %
Ignition temperature:	>200 °C
Vapour pressure: (at 20 °C)	2100 hPa
Vapour pressure: (at 50 °C)	4900 hPa
Density:	0,95 g/cm³

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

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

No data available

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50	5800 mg/kg	Rat	RTECS
	dermal	LD50	20000 mg/kg	Rabbit	IUCLID
	inhalative (4 h) vapour	LC50	76 mg/l	Rat	
1330-20-7	xylene				
	dermal	ATE	1100 mg/kg		
	inhalative gas	ATE	4500 ppm		
106-97-8	butane				
	inhalative (4 h) gas	LC50	273000 ppm	Rat	GESTIS
100-41-4	ethylbenzene				
	oral	LD50	3500 mg/kg	Rat	GESTIS
	dermal	LD50	15400 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50	17,2 mg/l	Rat	
	inhalative gas	ATE	4500 ppm		

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 7 of 10

Irritation and corrosivity

Vapours may cause drowsiness and dizziness.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information**12.1. Toxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS No	Chemical name				
	Aquatic toxicity	Method	Dose	[h] [d]	Species
67-64-1	acetone; propan-2-one; propanone				
	Acute fish toxicity	LC50	5540 mg/l	96 h	Onchorhynchus mykiss
	Acute crustacea toxicity	EC50	6100 mg/l	48 h	Daphnia magna
100-41-4	ethylbenzene				
	Acute algae toxicity	ErC50	3,6 mg/l	96 h	GESTIS

12.3. Bioaccumulative potential**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
75-28-5	isobutane	2,8
67-64-1	acetone; propan-2-one; propanone	-0,24
74-98-6	propane	2,36
106-97-8	butane	2,89
100-41-4	ethylbenzene	3,15

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Dispose of waste according to applicable legislation.

Waste disposal number of waste from residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing dangerous substances
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 8 of 10

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 625
Limited quantity: 1 L
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)
E0

Inland waterways transport (ADN)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L

Other applicable information (inland waterways transport)
E0

Marine transport (IMDG)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2, see SP63

Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: See SP277
EmS: F-D, S-U

Other applicable information (marine transport)
E0

Air transport (ICAO)

14.1. UN number: UN1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 9 of 10

Hazard label: 2.1

Special Provisions: A145 A167
Limited quantity Passenger: 30 kg G

IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

Other applicable information (air transport)E0
: Y203**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: yes

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

2004/42/EC (VOC): 52,625 % (578,875 g/l)

National regulatory information

Water contaminating class (D): 2 - water contaminating

SECTION 16: Other information**Relevant R-phrases (Number and full text)**

- | | |
|-------|---|
| 10 | Flammable. |
| 11 | Highly flammable. |
| 12 | Extremely flammable. |
| 20 | Harmful by inhalation. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 36 | Irritating to eyes. |
| 38 | Irritating to skin. |
| 48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| 50 | Very toxic to aquatic organisms. |
| 53 | May cause long-term adverse effects in the aquatic environment. |
| 65 | Harmful: may cause lung damage if swallowed. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |

Relevant H- and EUH-phrases (Number and full text)

- | | |
|------|---|
| 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. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Zinc Spray

Print date: 29.05.2015

Product code: VB_27

Page 10 of 10

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)