

Safety Data Sheet according to EC-Regulation 91/155/EEC

1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Metaflux 70-43 Glanz Zink (Spray)

Use of the substance/preparation

Corrosion protection

Company/undertaking identification

TECHNO-SERVICE GmbH Detmolder Str. 515 D-33605 Bielefeld
Telephone ++49 521 924440 Telefax ++49 521 207432

Emergency telephone / Office for advice

Advisory office in case of poisoning:

Tel.: ++49 521 924440

Telephone number of the company in case of emergencies:

Tel. --

2. Composition/information on ingredients

2.1 Chemical name	content %	symbol	R- phrases	EINECS, ELINCS	CAS
Acetone	1 -< 20	F/Xi	11-36-66-67	200-662-2	67-64-1
Xylene	1 -< 12,5	Xn/Xi	10-20/21-38	215-535-7	1330-20-7
Zinc powder - zinc dust (stabilized)	25 - 40 0,1	N	50-53	231-175-3	7440-66-6
Solvent naphtha (petroleum), light arom.	< 1	Xn/Xi/N	10-37-51-53- 65-66-67	265-199-0	64742-95-6
Naphtha (petroleum), hydrodesulfurized heavy	0,1 -< 1	Xn/N	10-51-53-65- 66-67	265-185-4	64742-82-1
Zinc oxide	0,1 -< 2,5	N	50-53	215-222-5	1314-13-2
For complete wording of the R-phrases, refer to point 16.					

3. Hazards identification

3.1 To people

See point 11 and 15.

Preparation is classified as hazardous in the sense of directive 1999/45/EC.

Product is extremely flammable.

Danger of bursting (explosion) when heated.

3.2 To the environment

See point 12.

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

4. First aid measures

4.1 Inhalation

Supply person with fresh air and consult doctor according to symptoms.

Remove person from danger area.

Keep Data Sheet available.

4.2 Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Keep Data Sheet available.

4.3 Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

4.4 Ingestion

Do not induce vomiting. Consult doctor immediately.

Keep Data Sheet available.

4.5 Special resources necessary for first aid

n.g.

5. Fire-fighting measures

5.1 Suitable extinguishing media

Dry extinguisher

CO2

5.2 Extinguishing media which must not be used for safety reasons

Water

5.3 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

In case of fire the following can develop:

Danger of explosion by prolonged heating.

Toxic pyrolysis products.

Irritating gases

5.4 Special protective equipment for fire-fighters

Protective respirator with independent air supply

5.5 Further information

Dispose of contaminated extinction water according to official regulations.

6. Accidental release measures

Refer to point 13. and for personal protection refer to point 8.

6.1 Personal precautions

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

6.2 Environmental measures

Prevent from entering drainage system.

If leakage occurs, dam up.

Prevent surface and ground-water infiltration, as well as ground penetration.

Avoid release to the environment.

6.3 Methods for cleaning up

Collect using absorbant material (e.g. Universal binding medium), and dispose of according to point 13.

If spray or gas escapes, ensure ample fresh air is available.

7. Handling and storage

7.1 Handling

Tips for safe handling:

See point 6.1

Handle only when appropriate ventilation system is activated.

Observe directions on label and instructions for use.

Keep away from sources of ignition - Do not smoke.

Only use working methods according to operating instructions.

Take measures against electrostatic charging, if appropriate.

Avoid aerosol formation.

7.2. Storage

Requirements for storage rooms and containers:

Not to be stored in gangways or stair wells.

Observe regulations for keeping separated.

Store products only unopened, in original packing.

Observe special regulations for aerosols.

Special storage conditions:

Protect against moisture and store closed.

Keep protected from direct sunlight and temperatures over 50°C.

Store cool

8. Exposure controls/personal protection

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AG values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Chemical Name	Acetone		
WEL-TWA:	500 ppm (1210 mg/m ³) (WEL, EC)	WEL-STEL:	1500 ppm (3620 mg/m ³) (WEL)
BMGV:	---	Other information:	---
Chemical Name	Xylene		
WEL-TWA:	50 ppm (220 mg/m ³) (WEL), 50 ppm (221 mg/m ³) (EC)	WEL-STEL:	100 ppm (441 mg/m ³) (WEL), 100 ppm (442 mg/m ³) (EC)
BMGV:	650 mmol methyl hippuric acid/mol creatinine in urine, post shift (Xylene, o-, m-, p- or mixed isomers) (BMGV)	Other information:	Sk (WEL)
Chemical Name	Solvent naphtha (petroleum), light arom.		
WEL-TWA:	20 ppm (100 mg/m ³) (AG)	WEL-STEL:	4 (AG)
BMGV:	---	Other information:	---
Chemical Name	Naphtha (petroleum), hydrodesulfurized heavy		
WEL-TWA:	70 ppm (350 mg/m ³) (AG)	WEL-STEL:	4 (AG)
BMGV:	---	Other information:	---
Chemical Name	Aluminium powder (stabilised)		
WEL-TWA:	10 mg/m ³ (total inh. dust), 4 mg/m ³ (resp. dust)	WEL-STEL:	---
BMGV:	---	Other information:	---
Chemical Name	Dimethyl ether		
WEL-TWA:	400 ppm (766 mg/m ³) (WEL), 1000 ppm (1920 mg/m ³) (EC)	WEL-STEL:	500 ppm (958 mg/m ³) (WEL)
BMGV:	---	Other information:	---

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period)
EH40. AG = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BG = "Biologischer Grenzwert" (biological limit value, Germany) | Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

8.1 Respiratory protection:

Filter A (EN 141)

If OES or MEL is exceeded.

8.2 Hand protection:

> 0,5 mm

Protective gloves in butyl rubber (EN 374).

8.3 Eye protection:

8.4 Skin protection:

Tight fitting protective goggles with side protection (EN 166).

Protective working garments (e.g. safety shoes EN 344, long-sleeved protective working garments)

Additional information on hand protection - No tests have been performed.

Selection made for preparations according to the best available knowledge and information on the ingredients.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

9. Physical and chemical properties

Physical state:

Substance:

Colour:

Odour:

pH-value undiluted:

Boiling point/range (°C):

Melting point/range (°C):

Flash point (°C):

Ignition temperature:

Vapour pressure:

* Dimethyl ether

Aerosol

Liquid

n.v.

Characteristic

n.v.

- 25 *

- 141°C

-42,2°C *

350°C *

4,0-4,8 bar/20°C, < 10 bar/50°C

10. Stability and reactivity

10.1 Conditions to avoid

See point 7

Protect from humidity.

Pressure increase will result in danger of bursting.

Heating, open flame, ignition sources

Electrostatic charge

10.2 Materials to avoid

See point 7

Do not bring into contact with water.

Avoid contact with other chemicals.

10.3 Hazardous decomposition products

See point 5.3

11. Toxicological information**11.1 Acute toxicity and immediate effects**

Ingestion, LD50 rat oral (mg/kg): n.v.

Inhalation, LC50 rat inhal.(mg/l/4h): n.v.

Skin contact, LD50 rat dermal (mg/kg): n.v.

Eye contact: n.v.

11.2 Delayed and chronic effects

Sensitization: n.g.

Carcinogenicity: n.g.

Mutagenicity: n.g.

Reproductive toxicity: n.g.

Narcosis: Possible

11.3. Further information

No classification according to calculation procedure.

The following may occur:

Possible development of fumes dangerous to health.

Inhalation of fumes may have narcotic effect.

Vapours may cause drowsiness and dizziness

Other dangerous properties cannot be ruled out.

12. Ecological information

Water hazard class (Germany): 2

Self classification: Yes (VwVwS)

Persistence and degradability: 91%/28d **

Behaviour in sewage plants: n.v.

Aquatic toxicity: See point 3.

Ecological toxicity: n.v.

** Acetone

13. Disposal considerations**13.1. for the material / preparation / residue**

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

16 05 04 gases in pressure containers (including halons) containing dangerous substances

20 01 99 other fractions not otherwise specified

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

13.2 for contaminated packing material

See point 13.1

Pay attention to local and national official regulations

14. Transport information

General statements

UN-Number: 1950

Road/Rail-transport (ADR/RID)

Class/packing-group: 2/-

UN 1950 AEROSOLS

Classification code: 5F

LQ: 2

Transport by sea

IMDG-code: 2/- (class/packing-group)

EmS: F-D, S-U

Marine Pollutant: n.a.

AEROSOLS

Transport by air

IATA: 2.1/-/ (class/secondary danger/packing-group)

Aerosols, flammable

Additional information:

Danger code and packing code on request.

15. Regulatory information**Classification according to Dangerous Product Regulations incl. EC Directives (67/548/EEC and 1999/45/EC)**

Symbols: F+/N

Indications of danger: Extremely flammable

Dangerous for the environment

R-phrases:

12 Extremely flammable.

Without adequate ventilation, formation of explosive mixtures may be possible.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases:

9 Keep container in a well-ventilated place.

23.f Do not breathe vapour/spray.

35 This material and its container must be disposed of in a safe way.

51 Use only in well-ventilated areas.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Additions:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Do not pierce or burn, even after use.

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

Keep away from sources of ignition - No smoking.

Keep out of the reach of children.

Observe restrictions: Yes

Observe youth employment law (German regulation).

VOC 1999/13/EC 71,8 - 72,35% w/w

16. Other information

These details refer to the product as it is delivered.

Storage class VCI (Germany): 2 B

Revised points: 2

The following phrases represent the prescribed R-phrases for the ingredients (designated in point 2).

11 Highly flammable.

36 Irritating to eyes.

66 Repeated exposure may cause skin dryness or cracking.

67 Vapours may cause drowsiness and dizziness.

10 Flammable.

20/21 Harmful by inhalation and in contact with skin.

38 Irritating to skin.

50 Very toxic to aquatic organisms.

53 May cause long-term adverse effects in the aquatic environment.

37 Irritating to respiratory system.

51 Toxic to aquatic organisms.

65 Also harmful:

may cause lung damage if swallowed.

Legend:

n.a. = not applicable / n.v., k.D.v. = not available / n.g. = not checked

OES = Occupational exposure standard / MEL = Maximum exposure limit / BMGV = Biological monitoring guidance value

AG = "Arbeitsplatzgrenzwert" (workplace limit value, Germany) / BG = "Biologischer Grenzwert" (biological limit value, Germany)

VbF = Regulations for flammable liquids (Austria)

WGK = water hazard class (Germany) - WGK 3 = very hazardous, WGK 2 = hazardous, WGK 1 = slightly hazardous to water

VOC = Volatile organic compounds / AOX = Adsorbable organic halogen compounds

VwVwS = Administrative Order relating to substances hazardous to water (Germany)

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.