

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 70-05 Torsions-Spray

Use of the substance/preparation

Rust remover

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:

Telephone number of the company in case of emergencies:

Tel. +49 521 924440

2. Composition/information on ingredients

2.1 Chemical name	content %	symbol	R-phrases	CAS	EINECS, ELINCS
Kerosine (petroleum), hydrodesulfurized	1 - 20	Xn	10-53-65		265-184-9
Propan-2-ol	20 - 40	F/Xi	11-36-67		200-661-7
Naphtha (petroleum), hydrotreated light	1 -< 25	F/Xn	11-52-53-65		265-151-9
Terpene alcohol/terpene hydrocarbons	2,5 - 10	Xi/N	38-43-51-53	8002-09-3	

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.

When using: development of explosive vapour/air mixture possible.

Irritation of the eyes

May cause sensitization by skin contact.

Vapours may cause drowsiness and dizziness

3.2 To the environment

Hydrocarbons can be harmful to water.

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

4. First aid measures

4.1 Inhalation

Remove person from danger area.

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

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
Foam

5.2 Extinguishing media which must not be used for safety reasons

High volume water jet

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

In case of fire the following can develop:

Oxides of carbon
Decomposition products
Gases hazardous to health
Danger of explosion by prolonged heating.
Explosive vapour/air mixture

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

If leakage occurs, dam up.

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
Ensure good ventilation.
Keep away from sources of ignition - Do not smoke.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Wash hands before breaks and at end of work.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.
If applicable:
Switch on available suction system.

7.2. Storage

Requirements for storage rooms and containers:

Store products only unopened, in original packing.
Not to be stored in gangways or stair wells.
Do not store with flammable or self-igniting materials.
Store products only unopened, in original packing.
Observe special regulations for aerosols.

Observe TRG 300 (German regulation).

Special storage conditions:

See point 10.2

Store cool

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

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 OES, MEL or MAK values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Chemical name	content %	OES, MEL, MAK, TRK	BMGV, BAT
Kerosine (petroleum), hydrodesulfurized	1 - 20	20 ppm (100 mg/m ³)	
Propan-2-ol	20 - 40	400 ppm (999 mg/m ³)	
Oil mist, mineral		5 mg/m ³	
Butane		600 ppm (1450 mg/m ³)	
Propane		1000 ppm (1800 mg/m ³)	
Isobutane		1000 ppm (2400 mg/m ³)	
Naphtha (petroleum), hydrotreated light	1 -< 25	170 ppm (600 mg/m ³)	

8.1 Respiratory protection:
Filter A (EN 141)

If OES-, MEL- or MAK-value is exceeded.

8.2 Hand protection:

With short-term contact:

Protective nitrile gloves (EN 374)

8.3 Eye protection:

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

8.4 Skin protection:

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:	Aerosol
Substance:	Liquid
Colour:	n.v.
Odour:	Characteristic
pH-value undiluted:	n.v.
Boiling point / range (°C):	-48 bis -1°C *
Melting point / range (°C):	n.v.
Flash point (°C): Flammability	-13
(solid/gas):	Yes
Autoflammability:	n.g.
Oxidising properties:	n.g.
Vapour pressure:	3,8-4,8 bar/20°C , <10 bar/50°C
* Butane	
* Propane	

10. Stability and reactivity

10.1 Conditions to avoid

See point 7

Pressure increase will result in danger of bursting.

Heating, open flame, ignition sources

10.2 Materials to avoid

See point 7

Avoid contact with oxidizing agents.

Avoid contact with other chemicals.

10.3 Hazardous decomposition products

See point 5.3

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

11.1.1 Ingestion, LD50 rat oral (mg/kg):	n.v.
11.1.2 Inhalation, LC50 rat inhal.(mg/l/4h):	n.v.
11.1.3 Skin contact, LD50 rat dermal (mg/kg):	n.v.
11.1.4 Eye contact:	Irritant

11.2 Delayed and chronic effects 11.2.1

Sensitization:	Yes (skin contact)
11.2.2 Carcinogenicity:	n.g.
11.2.3 Mutagenicity:	n.g.
11.2.4 Reproductive toxicity:	n.g.
11.2.5 Narcosis:	Possible

11.3. Further information

Classification according to calculation procedure.

The following may occur:

Inhalation of fumes may have narcotic effect.

Allergic reaction possible.

Ingestion:

Danger of aspiration.

Oedema of the lungs

Lung damage

12. Ecological information

Water hazard class (Germany):	1
Self classification:	Yes (VwVwS)
Persistence and degradability:	> 99,9% OECD 303A, (95% 21d mod. OECD-Screening-Test) *
Behaviour in sewage plants:	n.v.
Aquatic toxicity:	
Toxicity to fish:	
LC50 Pimephales promelas 9640 mg/l/96h *	
Toxicity to daphnia:	
EC50 Daphnia magna 13299 mg/l/48h *	
Toxicity to algae:	
IC50 Desmodesmus subspicatus > 1000 mg/l/72h *	
Ecological toxicity:	
Toxicity to bacteria:	
EC50 Photobacterium phosphoreum 22000 mg/l/15min *	
* Propan-2-ol	

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

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

Do not perforate, cut up or weld uncleaned container.

14. Transport information

General statements

UN-Number: 1950

Road/Rail-transport (ADR/RID)

Class/packing-group: 2/-

Classification code: 5F

LQ: 2

Transport by sea

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

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+/Xi

Indications of danger: Extremely flammable



Irritant

R-phrases:

12 Extremely flammable.

36 Irritating to eyes.

43 May cause sensitization by skin contact.

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

67 Vapours may cause drowsiness and dizziness.

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

S-phrases:

9 Keep container in a well-ventilated place.

23.f Do not breathe vapour/spray.

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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

37 Wear suitable gloves.

51 Use only in well-ventilated areas.

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.

Terpene alcohol/terpene hydrocarbons

Observe restrictions: Yes

Observe youth employment law (German regulation).

VOC 1999/13/EC 70-90%

16. Other information

These details refer to the product as it is delivered.

Storage class VCI (Germany): 2 B

Revised points: 15

TA air:

III

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

10 Flammable.

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

65 Harmful: may cause lung damage if swallowed.

11 Highly flammable.

36 Irritating to eyes.

67 Vapours may cause drowsiness and dizziness.

52 Harmful to aquatic organisms.

38 Irritating to skin.

43 May cause sensitization by skin contact.

51 Toxic to aquatic organisms.

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 / MAK = Maximum concentration for work place (Germany)

(Germany) / TRK = Technical guidance concentration (Germany) / BAT = Biological tolerance for work place (Germany)

VbF = Regulations for flammable liquids (Germany) / TRbF = Technical regulations for flammable liquids (Germany)

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.