

Material Safety Data Sheet

According to 91/155 EEC

Printing date 16.03.2007

Reviewed on 16.03.2007




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

- **Product details**
- **Trade name:** *METAFLUX 70-17 CC-80 Multi Function Spray*
- **Application of the substance / the preparation** *Lubricant*
- **Manufacturer/Supplier:**
*Techno Service GmbH
 Detmolder Strasse 515
 D-33605 Bielefeld
 Germany
 ++498 521 924440
 www.metaflux-ts.de*
- **Further information obtainable from:**
*Sales Department
 ++49 521 92444-0*
- **Information in case of emergency:**
*Central Phone Number
 ++49 521 924440*

2 Composition/information on ingredients

- **Chemical characterization**
- **Description:** *Mixture of substances listed below with nonhazardous additions.*

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7	butane	 F+; R 12	10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane	 F+; R 12	2.5-10%
CAS: 34590-94-8 EINECS: 252-104-2	(2-methoxymethylethoxy)propanol		2.5-10%
CAS: 75-28-5 EINECS: 200-857-2	isobutane	 F+; R 12	≤ 2.5%

- **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

3 Hazards identification

- **Hazard description:**



F+ Extremely flammable

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

R 12 Extremely flammable.

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.

Buildup of explosive mixtures possible without sufficient ventilation.

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Keep out of the reach of children

· Classification system:

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Wash with water and soap
Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** No special measures required.
- **Additional information** Cool endangered receptacles with water spray.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
Do not spray onto a naked flame or any incandescent material.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Keep container tightly sealed.

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Protect from heat and direct sunlight.

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

WEL	Short-term value: 1810 mg/m ³ , 750 ppm
	Long-term value: 1450 mg/m ³ , 600 ppm
	Carc (if more than 0.1% of buta-1.3-diene)

34590-94-8 (2-methoxymethylethoxy)propanol

WEL	Long-term value: 308 mg/m ³ , 50 ppm
	Sk

· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**



Protective gloves

· **Material of gloves** If contamination is possible, use gloves made of nitrile according EN 374

· **Penetration time of glove material** > 480 min / 0,4 mm thickness

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

Form:	Aerosol
Colour:	Colourless
Odour:	Pleasant

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: -44°C

· **Flash point:** -97°C

· **Ignition temperature:** 365°C

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Risk of bursting at temperatures > 50°C. Damage of the container may lead to the formation of explosive mixtures of gas/vapors with air.
· Explosion limits:	
Lower:	1.5 Vol %
Upper:	8.5 Vol %
Pressure (20°C)	3 - 3,5 bar
· Density at 20°C:	0.718 g/cm ³
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Solvent content:	
Organic solvents:	3.7 %
VOC (EC)	25.78 %
· Additional information	Vapors are heavier than air.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information

- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
empty cans: material recycling
filled cans: remove in accordance with local regulations

· **European waste catalogue**

16 00 00 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

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16 05 00	gases in pressure containers and discarded chemicals
16 05 04	gases in pressure containers (including halons) containing dangerous substances
07 00 00	WASTES FROM ORGANIC CHEMICAL PROCESSES
07 06 00	wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics
07 06 04	other organic solvents, washing liquids and mother liquors

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** 23
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label:** 2.1
- **Description of goods:** 1950 AEROSOLS
- **Remarks:** Transportation as "LIMITED QUANTITIES" according 3.4 ADR (LQ2)

- **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

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15 Regulatory information

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

F+ Extremely flammable

· **Risk phrases:**

12 Extremely flammable.

· **Safety phrases:**

23 Do not breathe fumes/aerosol.

24/25 Avoid contact with skin and eyes.

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

51 Use only in well-ventilated areas.

· **Special labelling of certain preparations:**

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.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

· **National regulations:**

Class	Share in %
NK	3.7

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

12 Extremely flammable.