

## 1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** *METAFLUX 70-76 Meta Lube II Spray*
- **Relevant identified uses of the substance or mixture and uses advised against**  
*No further relevant information available.*
- **Application of the substance / the preparation** *Lubricant*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Techno Service GmbH  
Detmolder Strasse 515  
D-33605 Bielefeld  
Germany  
++49 521 924440  
www.metaflux-ts.de*
- **Further information obtainable from:**  
*Sales Department  
++49 521 92444-0*
- **Emergency telephone number:**  
*Canutec:  
1-613-996-6666*

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
*H229: Pressurized container: May burst if heated.*



GHS02 flame

*Flam. Aerosol 1 H222 Extremely flammable aerosol.*

*Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.*

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

*R12: Extremely flammable.*

*R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*

- **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.*

- **Classification system:**

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

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

*The product is classified and labelled according to the CLP regulation.*

- **Hazard pictograms**



GHS02

- **Signal word** *Danger*

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# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 12.06.2015

revision: 2022-01-05

Trade name: **METAFLUX 70-76 Meta Lube II Spray**

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- **Hazard statements**

H229 Pressurized container: May burst if heated.  
 H222 Extremely flammable aerosol.  
 H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P102 Keep out of the reach of children.  
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 P251 Pressurized container: Do not pierce or burn, even after use.  
 P260 Do not breathe spray.  
 P211 Do not spray on an open flame or other ignition source.  
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
 P501 Dispose of contents/container in accordance with local regulations.

- **Additional information:** Void

- **Other hazards**

- **Results of PBT and vPvB assessment**






























- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Mixtures

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

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7	butane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	50-100%
CAS: 74-98-6 EINECS: 200-827-9	propane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	10-<25%
CAS: 75-28-5 EINECS: 200-857-2	isobutane  F+ R12  Flam. Gas 1, H220; Press. Gas, H280	3-<10%
CAS: 109-66-0 EINECS: 203-692-4	pentane  Xn R65;  F+ R12;  N R51/53 R66-67  Flam. Liq. 2, H225;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  STOT SE 3, H336	≤2.5%
EC number: 931-254-9 Reg.nr.: 01-2119484651-34	Hydrocarbons, C6, isoalkanes, <5% n-hexane  Xn R65;  Xi R38;  F R11;  N R51/53 R67  Flam. Liq. 2, H225;  Asp. Tox. 1, H304;  Aquatic Chronic 2, H411;  Skin Irrit. 2, H315; STOT SE 3, H336	1-<2.5%
CAS: 110-82-7 EINECS: 203-806-2	cyclohexane  Xn R65;  Xi R38;  F R11;  N R50/53 R67  Flam. Liq. 2, H225;  Asp. Tox. 1, H304;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410;  Skin Irrit. 2, H315; STOT SE 3, H336	0.3-<1%

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# Safety data sheet

## according to 1907/2006/EC, Article 31

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Trade name: **METAFLUX 70-76 Meta Lube II Spray**

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EC number: 926-605-8 Reg.nr.: 01-2119486291-36	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane ☒ Xn R65; ☒ F R11; ☒ N R51/53 R66-67 ----- ☒ Flam. Liq. 2, H225; ☒ Asp. Tox. 1, H304; ☒ Aquatic Chronic 2, H411; ☒ STOT SE 3, H336	0.1-<0.3%
CAS: 110-54-3 EINECS: 203-777-6	n-hexane ☒ Xn R48/20-62-65; ☒ Xi R38; ☒ F R11; ☒ N R51/53 R67 Repr. Cat. 3 ----- ☒ Flam. Liq. 2, H225; ☒ Repr. 2, H361f; STOT RE 2, H373; Asp. Tox. 1, H304; ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; STOT SE 3, H336	0.1-<0.3%
CAS: 68603-55-4 EINECS: 271-663-3	Amines, C12-14-alkyl, C6-10-alkyl phosphates ☒ Xi R36/38; ☒ N R51/53 ----- ☒ Aquatic Chronic 2, H411; ☒ Skin Irrit. 2, H315; Eye Irrit. 2, H319	0.1-<0.3%
	Amin-Carbonsäureverbindung ☒ Xi R38-41; ☒ N R50 ----- ☒ Eye Dam. 1, H318; ☒ Aquatic Acute 1, H400; ☒ Skin Irrit. 2, H315	0.1-<0.3%
CAS: 126019-82-7	O,O,O-tris(2(or 4)-C9-10-isoalkylphenyl) phosphorothioat ☒ N R51/53 ----- ☒ Aquatic Chronic 2, H411	0.1-<0.3%

· **Additional information:**

For the wording of the listed risk phrases refer to section 16.

EC-Numbers beginning with "9" are numbers given by ECHA and valid until an official registration number is published. Eventually given CAS-numbers valid for countries which are not subject to the REACH regulation or in regulations not yet updated with the new naming convention for hydrocarbon solvents.

### 4 First aid measures

· **Description of first aid measures**

· **General information:**

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** 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.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

### 5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:** No special measures required.

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· **Additional information** Cool endangered receptacles with water spray.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions 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.
- **Conditions for safe storage, including any incompatibilities**
- **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:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Recommended storage temperature:** 15 - 35 °C, max. 50 °C
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:****106-97-8 butane**

WEL (Great Britain)	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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**109-66-0 pentane**

WEL (Great Britain)	Long-term value: 1800 mg/m <sup>3</sup> , 600 ppm
IOELV (EU)	Long-term value: 3000 mg/m <sup>3</sup> , 1000 ppm

**Hydrocarbons, C6, isoalkanes, <5% n-hexane**

RCP-TWA (Great Britain)	Long-term value: 1400 mg/m <sup>3</sup>
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**110-82-7 cyclohexane**

WEL (Great Britain)	Short-term value: 1050 mg/m <sup>3</sup> , 300 ppm Long-term value: 350 mg/m <sup>3</sup> , 100 ppm
IOELV (EU)	Long-term value: 700 mg/m <sup>3</sup> , 200 ppm

**Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane**

RCP-TWA (Great Britain)	Long-term value: 1400 mg/m <sup>3</sup>
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**110-54-3 n-hexane**

WEL (Great Britain)	Long-term value: 72 mg/m <sup>3</sup> , 20 ppm
IOELV (EU)	Long-term value: 72 mg/m <sup>3</sup> , 20 ppm

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

· **Exposure controls**

· **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.

· **Protection of hands:**

· **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:** Safety glasses in case of splittings

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Aerosol

**Colour:** Colourless

· **Odour:** Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** Not applicable, as aerosol.

· **Flash point:** Not applicable, as aerosol.

· **Ignition temperature:** 365 °C

· **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:** 10.9 Vol %

**Pressure (20 °C)** 3 - 5 bar

· **Density at 20 °C:** 0.6 g/cm<sup>3</sup>

· **Solubility in / Miscibility with**

**water:** Not miscible or difficult to mix.

· **Solvent content:**

**Organic solvents:** 5.0 %

**VOC (EC)** 85.00 %

**Solids content:** 15.0 %

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- |                                 |  |
|---------------------------------|--|
| · <b>Other information</b>      | No further relevant information available. |
| · <b>Additional information</b> | Vapors are heavier than air.               |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Risk of bursting at temperatures >50 °C.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.
- **Additional information:** Stable for a storage time of min. 24 months

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**106-97-8 butane**

Inhalative	LC50/4 h	658 mg/l (rat)
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**74-98-6 propane**

Inhalative	LC50/4 h	> 20 mg/l (rat)
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**75-28-5 isobutane**

Inhalative	LC50/4 h (static)	> 20 mg/l (rat)
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**110-82-7 cyclohexane**

Oral	LD50	12705 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:**  
Harmful to aquatic organisms  
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.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.**13 Disposal considerations**

- **Waste treatment methods**
- **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
16 05 00	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing dangerous substances

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

**14 Transport information**

- **UN-Number**
- **ADR, IMDG, IATA** UN1950
- **UN proper shipping name**
- **ADR** 1950 AEROSOLS
- **IMDG** AEROSOLS
- **IATA** AEROSOLS, flammable

· **Transport hazard class(es)**· **ADR**

- **Class** 2 5F Gases.
- **Label** 2.1

· **IMDG, IATA**

- **Class** 2.1
- **Label** 2.1

· **Packing group**

- **ADR, IMDG, IATA** Void

· **Environmental hazards:**

- **Marine pollutant:** No

- **Special precautions for user** Warning: Gases.

- **Danger code (Kemler):** -
- **EMS Number:** F-D,S-U

- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

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Trade name: **METAFLUX 70-76 Meta Lube II Spray**

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· **Transport/Additional information:**· **ADR**· **Limited quantities (LQ)**

1L

· **Transport category**

2

· **Tunnel restriction code**

D

· **Remarks:**

Transportation as "LIMITED QUANTITIES" according 3.4 ADR is possible.

Sole marking: Sign for "Limited Quantities" (rhombus with two black edges)

Entry in the transportation document: Transportation according chapter 3.4 ADR

· **UN "Model Regulation":**

UN1950, AEROSOLS, 2.1

**15 Regulatory information**· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **National regulations:**· **Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Class	Share in %
I	0.2
NK	3.3

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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 phrases**

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

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.

R11 Highly flammable.

R12 Extremely flammable.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R50 Very toxic to aquatic organisms.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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- R62 Possible risk of impaired fertility.  
R65 Harmful: may cause lung damage if swallowed.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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