

**Metaflux 70-81 Lubricating Metal Spray**

Print date: 12.03.2018

Product code: 70-81

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Metaflux 70-81 Lubricating Metal Spray

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

**Use of the substance/mixture**

Aerosol

**Uses advised against**

none/none

**1.3. Details of the supplier of the safety data sheet**

Company name:	Metatec Limited
Street:	Fitzherbert Road
Place:	Portsmouth PO6 1RU
Telephone:	Tel. +44 2392 381382
e-mail:	sales@metatec.limited
Internet:	<a href="http://www.metatec.limited">http://www.metatec.limited</a>
Responsible Department:	sales@metatec.limited

**1.4. Emergency telephone number:**

Swiss Toxicological Information Centre (STIC) CH-8030 Zürich National 24 h emergency telephone: 145 (Outside of Switzerland: +41 44 251 51 51)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

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

R phrases:

Extremely flammable.

Irritating to skin.

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

Vapours may cause drowsiness and dizziness.

**GHS classification**

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

May cause drowsiness or dizziness.

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Toxic to aquatic life with long lasting effects.

### 2.2. Label elements

#### Hazardous components which must be listed on the label

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha

Signal word:

Danger

Pictograms:

GHS02-GHS07-GHS09



#### Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P210	Keep away from heat. No Smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe vapour Aerosol..
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P312	Call a POISON CENTER/doctor if you feel unwell.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to in accordance with official regulations.

### 2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

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### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
265-151-9	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha	20 - < 25 %
64742-49-0	F - Highly flammable, Xn - Harmful, Xi - Irritant, N - Dangerous for the environment R11-38-51-53-65-67	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411	
01-2119484659-18		
231-175-3	zinc powder - zinc dust (stabilized)	< 1 %
7440-66-6	N - Dangerous for the environment R50-53	
030-001-01-9	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	
204-881-4	Butylated hydroxytoluene	< 0.1 %
128-37-0	N - Dangerous for the environment R50-53	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	
01-2119555270-46		

Full text of R and H phrases: see Section 16.

### Further Information

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha (Index-No: 649-328-00-1):

Note P: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7).

Product does not contain listed SVHC substances.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of irritation of the respiratory tract seek medical advice.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, seek medical treatment.

#### After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

#### After ingestion

If swallowed, immediately drink: Water. Never give anything by mouth to an unconscious person or a person with cramps. Do not induce vomiting. Caution if victim vomits: Risk of aspiration! Immediately get medical attention.

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

No symptoms known up to now.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### **5.1. Extinguishing media**

##### **Suitable extinguishing media**

Foam. Carbon dioxide. Extinguishing powder.

##### **Unsuitable extinguishing media**

High power water jet.

#### **5.2. Special hazards arising from the substance or mixture**

Combustible. Vapours may form explosive mixtures with air. Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

#### **5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical resistant suit.

#### **Additional information**

Use water spray/stream to protect personnel and to cool endangered containers. Use a water spray jet to knock down vapours/gases/mists. Contaminated fire-fighting water must be collected separately. Do not empty into drains or the aquatic environment. In case of fire and/or explosion do not breathe fumes.

### SECTION 6: Accidental release measures

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eye and clothing. Wear personal protection equipment.

#### **6.2. Environmental precautions**

Do not empty into drains or the aquatic environment. Explosion hazard. Eliminate leaks immediately. Prevent spreading over great surfaces (e.g. by damming or installing oil booms). In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

#### **6.3. Methods and material for containment and cleaning up**

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal. Ventilate affected area.

#### **6.4. Reference to other sections**

See protective measures under point 7 and 8.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Use only in well-ventilated areas. Take precautionary measures against static discharges. Do not spray into flames or ignition sources. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Heating causes rise in pressure with risk of bursting.

#### **7.2. Conditions for safe storage, including any incompatibilities**

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

##### **Advice on storage compatibility**

Do not store together with: Radioactive substances. Infectious substances. Organic peroxides. Oxidizing solids. Oxidizing liquids. Pyrophoric liquids and solids. Flammable substances. Substances or mixtures which, in contact with water emit flammable gases.

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### Further information on storage conditions

Recommended storage temperature: 10-30°C Do not store at temperatures over: 50°C

### 7.3. Specific end use(s)

Observe technical data sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
128-37-0	2,6-Di-tert-butyl-p-cresol	-	10		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha		600		TWA (8 h)	AGS2.9
					STEL (15 min)	AGS2.9
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL

### 8.2. Exposure controls



#### Appropriate engineering controls

Use only outdoors or in a well-ventilated area.

#### Protective and hygiene measures

Take off immediately all contaminated clothing. Wash hands before breaks and at the end of work.  
When using do not eat, drink or smoke.

#### Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

#### Hand protection

Wear suitable gloves.

Pull-over gloves of rubber. DIN EN 374

Suitable material:

(penetration time (maximum wearing period):  $\geq 4$ h):

Butyl rubber. (0,5mm)

In case of reutilization, clean gloves before taking off and store in well-aired place.

#### Skin protection

Protective clothing.

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection required in case of:

Generation/formation of aerosols

exceeding critical value

insufficient ventilation.

Suitable respiratory protective equipment: Combination filter device (DIN EN 141).. Type A/P3

The filter class must be suitable for the maximum contaminant concentration

(gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

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Only use breathing apparatus with CE-label including the four-digit identification number. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, closed-circuit breathing apparatus must be used!

### Environmental exposure controls

Do not empty into drains or the aquatic environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	grey
Odour:	characteristic

#### Test method

pH-Value:	N/A
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#### Changes in the physical state

Initial boiling point and boiling range:	N/A
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Flash point:	not determined
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#### Explosive properties

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

Lower explosion limits:	not determined
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Upper explosion limits:	not determined
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Ignition temperature:	not determined
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#### Oxidizing properties

none/none

Vapour pressure: (at 20 °C)	4,2 hPa
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Vapour pressure: (at 50 °C)	8,2 hPa
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Density:	0,6849 g/cm <sup>3</sup>
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Water solubility:	not miscible
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Viscosity / dynamic:	N/A
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Solvent content:	70,00 %- Data concerning the Directive 1999/13/EC on the limitation of emissions of volatile organic compounds (VOC-RL)
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

Stable under normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

Heating causes rise in pressure with risk of bursting.

### 10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

### 10.5. Incompatible materials

No information available.

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### 10.6. Hazardous decomposition products

In use, may form flammable/explosive vapour-air mixture. Can be released in case of fire: Carbon dioxide (CO<sub>2</sub>). Carbon monoxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicokinetics, metabolism and distribution

No information available.

#### Acute toxicity

Based on available data, the classification criteria are not met.

#### Acute toxicity

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha					
		oral	LD50	>2000 mg/kg	Rat.	MSDS extern.
		dermal	LD50	>2000 mg/kg	Rat.	MSDS extern.
128-37-0	Butylated hydroxytoluene					
		oral	LD50	890 mg/kg	Rat.	

#### Irritation and corrosivity

Causes skin irritation.

Irritant effect on the eye: Not an irritant.

#### Sensitising effects

Based on available data, the classification criteria are not met.

Product is: no danger of sensitization. The statement is derived from the properties of the components.

#### STOT-single exposure

May cause drowsiness or dizziness. (Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha)

#### Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Subacute oral toxicity NOEL = 500 mg/kg (Rat.)

Subchronic inhalative toxicity NOAEC = 10000mg/m<sup>3</sup> (Rat.)

Subacute dermal toxicity NOEL = 2000 mg/kg (Rabbit.)

Lit: ECHA Dossier

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

No experimental indications of mutagenicity in-vitro exist.

No experimental indications of mutagenicity in-vivo exist.

No indications of human carcinogenicity exist.

Reproductive toxicity: NOAEL = >20000 mg/m<sup>3</sup> (Rat.)

Developmental toxicity/teratogenicity NOAEL = 23900 mg/m<sup>3</sup> (Rat.)

Butylated hydroxytoluene:

No experimental indications of mutagenicity in-vitro exist.

No experimental indications of mutagenicity in-vivo exist.

Reproductive toxicity: NOAEL = 100 mg/kg (Rat.)

Developmental toxicity/teratogenicity NOAEL = 100 mg/kg (Rat.)

Lit: ECHA Dossier

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### Aspiration hazard

Based on available data, the classification criteria are not met.

### Specific effects in experiment on an animal

No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS No	Chemical name	Method	Dose	[h]   [d]	Species	Source
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha					
	Acute fish toxicity	LC50	<10 mg/l	96 h		MSDS extern.
	Acute algae toxicity	ErC50	<100 mg/l			MSDS extern.
128-37-0	Butylated hydroxytoluene					
	Acute crustacea toxicity	EC50	1,44 mg/l	48 h		

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64742-49-0	Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha	>3

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

### 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

Waste disposal according to official state regulations. Cleaned containers may be recycled.

#### 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 used product

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

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances  
Classified as hazardous waste.

#### Contaminated packaging

Handle contaminated packaging in the same way as the substance itself.



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### SECTION 14: Transport information

#### Land transport (ADR/RID)

**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  
Transport category: 2  
Tunnel restriction code: D

#### Other applicable information (land transport)

Excepted quantity: 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: LQ 2

#### Other applicable information (inland waterways transport)

Excepted quantity: 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

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

#### Other applicable information (marine transport)

Excepted quantity: E0

#### Air transport (ICAO)

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



Special Provisions: A145 A167 A803  
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)

Excepted quantity: E0  
Passenger-LQ: Y203

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha  
zinc powder - zinc dust (stabilized)

### 14.6. Special precautions for user

refer to chapter 6-8

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulatory information

1999/13/EC (VOC): 70 %, VOC Directive 2004/42/EC: 479,43 g/l

#### Additional information

The preparation is dangerous in the sense of Directive 1999/45/EC.  
This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].  
aerosol directive (75/324/EEC).  
Regulation 96/82/EC for danger control following severe accidents with dangerous substances:  
Appendix I, Part 2, No 8 (Seveso II)

#### National regulatory information

Employment restrictions: Observe employment restrictions for young people.  
Water contaminating class (D): 3 - highly water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Changes

Rev. 1,0 Initial release 01.04.2014

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### 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)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
NOAEL: No observed adverse effect level

### Full text of R phrases referred to under Sections 2 and 3

11	Highly flammable.
12	Extremely flammable.
38	Irritating to skin.
50	Very toxic to aquatic organisms.
51	Toxic to aquatic organisms.
51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
67	Vapours may cause drowsiness and dizziness.

### Full text of H statements referred to under Sections 2 and 3

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
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.

### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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