Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.06.2021 *Revision: 18.06.2021*

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

· **1.1 Product identifier**

· **Trade name: Metaflux 70-81 Lubricating Metal Spray**
· **UFI:** DM92-90E3-F00M-H54J
· **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
· **Application of the substance / the mixture** Lubricant

· **1.3 Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

TECHNO-SERVICE GmbH
Detmolder Strasse 515
D-33605 Bielefeld
Tel.: +49 (0)521 92 444 0
Fax: +49 (0)521 207432
info@metaflux.de
www.metaflux.de

Further information obtainable from:
info@metaflux.de

1.4 Emergency telephone number:
+49 (0) 70024112112 or +1 8725888271 (TSF) 24h

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· **Classification according to Regulation (EC) No 1272/2008**

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
Skin Irrit. 2	H315	Causes skin irritation.
STOT SE 3	H336	May cause drowsiness or dizziness.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.

· **2.2 Label elements**
· **Labelling according to Regulation (EC) No 1272/2008**
The labelling of an aspiration hazard (Asp. Tox. 1 H304) is not required for aerosols and containers with a sealed spray attachmend (Regulation (EC) 1272/2008, Annex I, 1.3.3).
The product is classified and labelled according to the CLP regulation.
· **Hazard pictograms**

GHS02 GHS07 GHS09

· **Signal word** Danger

· **Hazard-determining components of labelling:**
Hydrocarbons, C6, isoalkanes, <5% n-hexane
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane
titanium dioxide
· **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

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H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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 vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves.
P312 Call a POISON CENTER/doctor if you feel unwell.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of container with content as special waste.

· **Additional information:**
Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

*
SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:**
Mixture of substances listed below with nonhazardous compounds or compounds with no duty to declare.

· **Dangerous components:**

CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27	Isobutane (< 0,1 % 1,3-butadiene) Flam. Gas 1A, H220; Press. Gas (Liq.), H280	25-50%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	propane Flam. Gas 1A, H220; Press. Gas (Liq.), H280	10-25%
CAS: 64742-49-0 EC number: 931-254-9 Reg.nr.: 01-2119484651-34	Hydrocarbons, C6, isoalkanes, <5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	≥10-<15%
CAS: 92045-53-9 EC number: 927-510-4 Reg.nr.: 01-2119475515-33	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	≥2.5-<10%
CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32	Butane (< 0,1 % 1,3-butadiene) Flam. Gas 1A, H220; Press. Gas (Liq.), H280	2.5-10%
CAS: 1317-33-5 EINECS: 215-263-9	molybdenum disulphide substance with a Community workplace exposure limit	2.5-10%
CAS: 7429-90-5 EINECS: 231-072-3 Reg.nr.: 01-2119529243-45	aluminium powder (stabilised) Flam. Sol. 1, H228; Water-react. 2, H261	2.5-10%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17	titanium dioxide Carc. 2, H351	2.5-10%
CAS: 64742-49-0 EC number: 926-605-8 Reg.nr.: 01-2119486291-36	Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	≥0.25-<2.5%
CAS: 7440-66-6 EINECS: 231-175-3	zinc powder -zinc dust (stabilized) Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≥0.25-≤1%

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· **Additional information:**
EC-Numbers beginning with "9" are numbers given by ECHA for the purpose of registration according REACH. Eventually mentioned 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.
For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Take affected persons out into the fresh air.
Do not leave affected persons unattended.
· **After inhalation:** *In case of unconsciousness place patient stably in side position for transportation.*
· **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
· **After eye contact:** *Rinse opened eye for several minutes under running water.*
· **After swallowing:**
If product is swallowed (normally not possible) DO NOT induce vormiting. DANGER OF ASPIRATION. Search for medical help..
· **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **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*
· **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
Risk of bursting in case of fire heat
· **5.3 Advice for firefighters**
· **Protective equipment:**
Mouth respiratory protective device.
Wear fully protective suit.
· **Additional information** *Cool endangered receptacles with water spray.*

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Keep sources of ignition (flames, sparks, etc.) away. Do not use engines near by (potential source of ignition)
· **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

*
SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** *Ensure good ventilation/exhaustion at the workplace.*
· **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
Pressurised 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.

· **7.2 Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:**
Observe official regulations on storing packagings with pressurised containers.
· **Information about storage in one common storage facility:** *Store away from oxidising agents.*
· **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Recommended storage temperature:** *15 - 35°C, max. 50°C*
· **Storage class:** *German storage class: 2B (Aerosols)*
· **7.3 Specific end use(s)** *No further relevant information available.*

SECTION 8: Exposure controls/personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:**	
64742-49-0 Hydrocarbons, C6, isoalkanes, <5% n-hexane	
RCP-TWA (Great Britain)	*Long-term value: 1400 mg/m³*
92045-53-9 Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
RCP-TWA (Great Britain)	*Long-term value: 1400 mg/m³*
106-97-8 Butane (< 0,1 % 1,3-butadiene)	
WEL (Great Britain)	*Short-term value: 1810 mg/m³, 750 ppm* *Long-term value: 1450 mg/m³, 600 ppm* *Carc (if more than 0.1% of buta-1.3-diene)*
1317-33-5 molybdenum disulphide	
WEL (Great Britain)	*Short-term value: 20 mg/m³* *Long-term value: 10 mg/m³* *as Mo*
64742-49-0 Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane	
RCP-TWA (Great Britain)	*Long-term value: 1400 mg/m³*
110-54-3 n-hexane	
WEL (Great Britain)	*Long-term value: 72 mg/m³, 20 ppm*
IOELV (EU)	*Long-term value: 72 mg/m³, 20 ppm*

· **DNELs**		
64742-49-0 Hydrocarbons, C6, isoalkanes, <5% n-hexane		
Oral	*DNEL Endverbraucher/ Consumers / Consommateur*	*1,301 mg/kg BW/ day (.)*
Dermal	*DNEL - Endverbraucher/ Consumers / Consommateur*	*1,377 mg/kg BW /day (.)*

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	DNEL Arbeiter / Workers/ Travailleur	13,964 mg/kg BW /day (.)
Inhalative	DNEL Endverbraucher/ Consumers / Consommateur	1,137 mg /m3 (.)
	DNEL Arbeiter / Workers/ Travailleur	5,306 mg /m3 (.)
92045-53-9 Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		
Oral	DNEL Endverbraucher/ Consumers / Consommateur	149 mg/kg BW/ day (hum) chronische Exposition, Systemische Wirkungen/ chronic Exposition, systemic effects/ Chronique Exposition, Systémique Effets
Dermal	DNEL - Endverbraucher/ Consumers / Consommateur	149 mg/kg BW /day (.) chronische Exposition, Systemische Wirkungen/ chronic Exposition, systemic effects/ Chronique Exposition, Systémique Effets
	DNEL Arbeiter / Workers/ Travailleur	300 mg/kg BW /day (.) chronische Exposition, Systemische Wirkungen/ chronic Exposition, systemic effects/ Chronique Exposition, Systémique Effets
Inhalative	DNEL Endverbraucher/ Consumers / Consommateur	477 mg /m3 (.) chronische Exposition, Systemische Wirkungen/ chronic Exposition, systemic effects/ Chronique Exposition, Systémique Effets
	DNEL Arbeiter / Workers/ Travailleur	2,085 mg /m3 (.)
64742-49-0 Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane		
Oral	DNEL Endverbraucher/ Consumers / Consommateur	1,301 mg/kg BW/ day (.)
Dermal	DNEL - Endverbraucher/ Consumers / Consommateur	1,377 mg/kg BW /day (.)
	DNEL Arbeiter / Workers/ Travailleur	13,964 mg/kg BW /day (.)
Inhalative	DNEL Endverbraucher/ Consumers / Consommateur	1,131 mg /m3 (.)
	DNEL Arbeiter / Workers/ Travailleur	5,306 mg /m3 (.)

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

· **8.2 Exposure controls**
· **Personal protective equipment:**
· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Filter A/P2
· **Protection of hands:**

Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
If contamination is possible, use gloves made of nitrile according EN 374
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
> 480 min / 0,4 mm thickness

· **Eye protection:**

Safety glasses in case of spittings

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
Form:	*Fluid*
Colour:	*Grey*
· **Odour:**	*Characteristic*
· **Odour threshold:**	*Not determined.*
· **pH-value:**	*Not applicable.*
· **Change in condition**	
Melting point/freezing point:	*Undetermined.*
Initial boiling point and boiling range:	*-44 °C* *value concers to propellant*
· **Flash point:**	*-97 °C* *concerns to propellant*
· **Flammability (solid, gas):**	*Not applicable.*
· **Ignition temperature:**	*365 °C*
· **Decomposition temperature:**	*Not determined.*
· **Auto-ignition temperature:**	*Product is not selfigniting.*
· **Explosive properties:**	*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:	*1.7 Vol %*
Upper:	*10.9 Vol %*
· **Vapour pressure:**	*Not determined.*
· **Pressure (20°C) at 20 °C**	*3.5-5.0 bar*
· **Density at 20 °C:**	*0.692 g/cm³*
· **Relative density**	*Not determined.*
· **Vapour density**	*Not determined.*

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· **Evaporation rate**	Not applicable.
· **Solubility in / Miscibility with water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
Dynamic:	Not determined.
Kinematic:	Not determined.
· **Solvent content:**	
Organic solvents:	ca. 20 %
VOC (EC)	69.60 %
Solids content:	ca. 30 %
· **9.2 Other information**	
Additional information	Vapors are heavier than air.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:** Risk of bursting at temperatures >50°C.
· **10.3 Possibility of hazardous reactions**
Contact with water releases flammable gases.
By use or incidental release the formation of explosive vapor/air mixtures is possible.
· **10.4 Conditions to avoid**
Temperatures >50°C
Avoid the use in the near of ignition sources.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.
· **Additional information:** Stable for a storage time of min. 24 months

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**		
75-28-5 Isobutane (< 0,1 % 1,3-butadiene)		
Inhalative	LC50/4 h	>20 mg/l (rat)
74-98-6 propane		
Inhalative	LC50/4 h	>20 mg/l (rat)
	LC50 /15 min	1,443 mg/l (rat)
64742-49-0 Hydrocarbons, C6, isoalkanes, <5% n-hexane		
Oral	LD50	>16,750 mg/kg (rat)
Dermal	LD50	>3,350 mg/kg (rat)
Inhalative	LC50/4 h	>259 mg/l (rat)
106-97-8 Butane (< 0,1 % 1,3-butadiene)		
Inhalative	LC50/4 h	658 mg/l (rat)
13463-67-7 titanium dioxide		
Oral	LD50	>20,000 mg/kg (rat)
Dermal	LD50	>10,000 mg/kg (rabbit)

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Inhalative	*LC50/4 h*	*>6.82 mg/l (rat)*
64742-49-0 Hydrocarbons, C6-C7, isoalkanes, cyclics, < 5% n-hexane		
Oral	*LD50*	*>16,750 mg/kg (rat)*
Dermal	*LD50*	*>3,350 mg/kg (rat)*
Inhalative	*LC50/4 h*	*>259 mg/l (rat)*

· ***Primary irritant effect:***
· ***Skin corrosion/irritation***
irritant
Causes skin irritation.
· ***Serious eye damage/irritation*** *Based on available data, the classification criteria are not met.*
· ***Respiratory or skin sensitisation*** *Based on available data, the classification criteria are not met.*
· ***Additional toxicological information:***
· ***CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)***
· ***Germ cell mutagenicity*** *Based on available data, the classification criteria are not met.*
· ***Carcinogenicity*** *Based on available data, the classification criteria are not met.*
· ***Reproductive toxicity*** *Based on available data, the classification criteria are not met.*
· ***STOT-single exposure***
May cause drowsiness or dizziness.
· ***STOT-repeated exposure*** *Based on available data, the classification criteria are not met.*
· ***Aspiration hazard***
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

· ***12.1 Toxicity***
· ***Aquatic toxicity:*** *No further relevant information available.*
· ***12.2 Persistence and degradability*** *No further relevant information available.*
· ***12.3 Bioaccumulative potential*** *No further relevant information available.*
· ***12.4 Mobility in soil*** *No further relevant information available.*
· ***Ecotoxical effects:***
· ***Remark:*** *Toxic for fish*
· ***Additional ecological information:***
· ***General notes:***
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
· ***12.5 Results of PBT and vPvB assessment***
· ***PBT:*** *Not applicable.*
· ***vPvB:*** *Not applicable.*
· ***12.6 Other adverse effects*** *No further relevant information available.*

SECTION 13: Disposal considerations

· ***13.1 Waste treatment methods***
· ***Recommendation***
empty cans: material recycling
filled cans: remove in accordance with local regulations
Hand over to hazardous waste disposers.

· ***European waste catalogue***	
16 00 00	*WASTES NOT OTHERWISE SPECIFIED IN THE LIST*
16 05 00	*gases in pressure containers and discarded chemicals*

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

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

SECTION 14: Transport information

· **14.1 UN-Number**
· **ADR, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**
· **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
· **IMDG** AEROSOLS (Naphtha (petroleum), hydrotreated, light, HEPTANES), MARINE POLLUTANT
· **IATA** AEROSOLS, flammable

· **14.3 Transport hazard class(es)**

· **ADR**

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

· **IMDG**

· **Class** 2.1
· **Label** 2.1

· **IATA**

· **Class** 2.1
· **Label** 2.1

· **14.4 Packing group**
· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:** Product contains environmentally hazardous substances: Naphtha (petroleum), hydrotreated, light
· **Marine pollutant:** Symbol (fish and tree)
· **Special marking (ADR):** Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Gases.
· **Hazard identification number (Kemler code):** -
· **EMS Number:** F-D,S-U
· **Stowage Code** SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· **Segregation Code** SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1

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·	*except for division 1.4.* *For AEROSOLS with a capacity above 1 litre:* *Segregation as for the appropriate subdivision of class 2.* *For WASTE AEROSOLS:* *Segregation as for the appropriate subdivision of class 2.*
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	*Not applicable.*
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	*1L*
· **Excepted quantities (EQ)**	*Code: E0* *Not permitted as Excepted Quantity*
· **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* *Tunnel category "E" in case of a load of 8000 kg (rgross weight) or more.* *Hazardous goods under the transport regulations listed above may be subject to special regulations. For details please consult the relevant transport regulations*
· **IMDG**	
· **Limited quantities (LQ)**	*1L*
· **Excepted quantities (EQ)**	*Code: E0* *Not permitted as Excepted Quantity*
· **UN "Model Regulation":**	*UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS*

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Directive 2012/18/EU**
· **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
· **Seveso category**
P3a FLAMMABLE AEROSOLS
E2 Hazardous to the Aquatic Environment
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** *150 t*
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** *500 t*

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

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· **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	0.6
NK	19.0

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

SECTION 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.
H228 Flammable solid.
H261 In contact with water releases flammable gases.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
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.

· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international 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 Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1A: Flammable gases – Category 1A
Aerosol 1: Aerosols – Category 1
Press. Gas (Liq.): Gases under pressure – Liquefied gas
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Sol. 1: Flammable solids – Category 1
Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· *** Data compared to the previous version altered.**