

**Safety Data Sheet**

according to UK REACH Regulation

**Conductive silver varnish spray**

Revision date: 26.10.2022

Product code: 0118-Spray

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Conductive silver varnish spray

UFI: S0TH-8AQH-9004-SKCG

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

Conductive varnish for electroplating

**Uses advised against**

Use restriction according to REACH annex XVII, no.: 40

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

Company name: MARAWE GmbH & Co. KG  
Street: Donaustauer Str. 378 - Gebäude 64  
Place: D-93055 Regensburg  
Telephone: +49 941 / 29020439      Telefax: +49 941 / 29020593  
e-mail: info@marawe.de  
Contact person: Product safety department  
Internet: www.marawe.de

**1.4. Emergency telephone number:**

+49 941 / 29020439,  
Mo-Do 9:00 - 16:00 Uhr; Fr 9:00 - 14:00 Uhr

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Aerosol 1; H222-H229  
Eye Irrit. 2; H319  
STOT SE 3; H336  
Aquatic Acute 1; H400  
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

1-methoxy-2-propanol; monopropylene glycol methyl ether  
acetone; propan-2-one; propanone  
butan-1-ol; n-butanol

**Signal word:** Danger**Pictograms:****Hazard statements**

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H410 Very toxic to aquatic life with long lasting effects.

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**Precautionary statements**

P101	If medical advice is needed, have product container or label at hand.
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.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to according to local/national waste disposal regulations.

**Special labelling of certain mixtures**

EUH066	Repeated exposure may cause skin dryness or cracking.
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**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

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**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
115-10-6	dimethyl ether			35 - < 40 %
	204-065-8		01-2119472128-37	
	Flam. Gas 1A, Compressed gas; H220 H280			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			20 - < 25 %
	203-539-1	603-064-00-3	01-2119457435-35	
	Flam. Liq. 3, STOT SE 3; H226 H336			
67-64-1	acetone; propan-2-one; propanone			15 - < 20 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
7440-22-4	Silver Powder			10 - < 15 %
	231-131-3			
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
	xylene			1.9 - < 5 %
	905-588-0		01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304			
71-36-3	butan-1-ol; n-butanol			1 - < 1.9 %
	200-751-6			
	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H302 H315 H318 H335 H336			
80-62-6	methyl methacrylate; methyl 2-methylprop-2-enoate; methyl 2-methylpropenoate			< 1 %
	201-297-1	607-035-00-6		
	Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3; H225 H315 H317 H335			

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
107-98-2	203-539-1	1-methoxy-2-propanol; monopropylene glycol methyl ether	20 - < 25 %
		inhalation: LC50 = >20 mg/l (vapours); dermal: LD50 = 13500 mg/kg; oral: LD50 = 4016 mg/kg	
67-64-1	200-662-2	acetone; propan-2-one; propanone	15 - < 20 %
		inhalation: LC50 = 76 mg/l (vapours); dermal: LD50 = >15800 mg/kg; oral: LD50 = 5800 mg/kg	
7440-22-4	231-131-3	Silver Powder	10 - < 15 %
		oral: LD50 = > 2000 mg/kg M acute; H400: M=1000 M chron.; H410: M=1000	
	905-588-0	xylene	1.9 - < 5 %
		inhalation: LC50 = 29000 mg/l (vapours); dermal: LD50 = 2000 mg/kg; oral: LD50 = 3523 mg/kg	
71-36-3	200-751-6	butan-1-ol; n-butanol	1 - < 1.9 %
		inhalation: LC50 = 17000 mg/l (vapours); dermal: LD50 = 3430 mg/kg; oral: LD50 = 2292 mg/kg	

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**After inhalation**

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use)

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or safety data sheet if possible).

**After contact with skin**

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist. Remove contact lenses, if present and easy to do.

**After ingestion**

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water. Get medical help if you feel unwell.

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

May cause headache, drowsiness and nausea. Higher doses may cause loss of balance, narcosis and unconsciousness.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.

**Unsuitable extinguishing media**

High power water jet.

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

Extremely flammable aerosol. Pressurized container: May burst if heated. Vapours can form explosive mixtures with air. Do not breathe explosive- and combustion gases. Exposure to decomposition products can be harmful to health.

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove all sources of ignition. Provide adequate ventilation. Keep away from sources of ignition - No smoking. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Do not breathe gas/vapour/aerosol.

**For non-emergency personnel**

Leave the danger zone immediately. Keep unprotected persons away.

**For emergency responders**

Wear respiratory protection.

**6.2. Environmental precautions**

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

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

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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**Other information**

Provide adequate ventilation.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Do not pierce or burn, even after use. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

**Advice on protection against fire and explosion**

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 naked flames or any incandescent material. Vapours can form explosive mixtures with air. Take action to prevent static discharges. Keep away from sources of ignition - No smoking.

**Advice on general occupational hygiene**

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Hints on joint storage**

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

**7.3. Specific end use(s)**

Conductive varnish for electroplating

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

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**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
71-36-3	Butan-1-ol	50	154		STEL (15 min)	WEL
115-10-6	Dimethyl ether	400	766		TWA (8 h)	WEL
		500	958		STEL (15 min)	WEL
80-62-6	Methyl methacrylate	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
7440-22-4	Silver, metallic	-	0.1		TWA (8 h)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			
Consumer DNEL, long-term		oral	systemic	33 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	183 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	78 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	369 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	systemic	553,5 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	43,9 mg/m <sup>3</sup>
67-64-1	acetone; propan-2-one; propanone			
Consumer DNEL, long-term		oral	systemic	62 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	186 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	62 mg/kg bw/day
Worker DNEL, acute		inhalation	local	2420 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	1210 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	200 mg/m <sup>3</sup>

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#### PNEC values

CAS No	Substance	Value
Environmental compartment		
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	
Freshwater		10 mg/l
Freshwater (intermittent releases)		100 mg/l
Freshwater sediment		52,3 mg/kg
Marine sediment		5,2 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		4,59 mg/kg
67-64-1	acetone; propan-2-one; propanone	
Freshwater		10,6 mg/l
Marine water		1,06 mg/l
Freshwater sediment		30,4 mg/kg
Marine sediment		3,04 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		29,5 mg/kg
7440-22-4	Silver Powder	
Freshwater		0,00004 mg/l
Marine water		0,00086 mg/l
Freshwater sediment		438 mg/kg
Marine sediment		438 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,025 mg/l
Soil		0,794 mg/kg

#### 8.2. Exposure controls



#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Tight sealing protective goggles (DIN EN 166).

##### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Aerosol
Colour:	silver grey
Odour:	solvent-like

**Changes in the physical state**

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	<0 °C

**Flammability**

Gas:	not applicable
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**Explosive properties**

Heating may cause an explosion.

Lower explosion limits:	> 1,5 vol. %
Upper explosion limits:	> 13,7 vol. %
Auto-ignition temperature:	< 270 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	<4000 hPa
Density:	0,8 - 0,9 g/cm <sup>3</sup>
Relative vapour density:	not determined

**9.2. Other information****Information with regard to physical hazard classes**

Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

Solvent content:	84,60 %
Solid content:	not determined
Evaporation rate:	not determined

**Further Information****SECTION 10: Stability and reactivity****10.1. Reactivity**

Extremely flammable aerosol. Pressurized container: May burst if heated.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.



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#### 10.3. Possibility of hazardous reactions

Exothermic reactions with: Oxidizing agents.

#### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air. Risk of explosion by shock, friction, fire or other sources of ignition (R2). Avoid high temperatures or direct sunlight.

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

 Upon heating and in case of fire, the following may be released: Oxocarbons (CO, CO<sub>2</sub>), acrylic monomers.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

##### Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50 mg/kg	4016	Rat	Manufacturer
	dermal	LD50 mg/kg	13500	Rabbit	Manufacturer
	inhalation (4 h) vapour	LC50	>20 mg/l	Rat	Manufacturer
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50 mg/kg	5800	Rat	GESTIS
	dermal	LD50 mg/kg	>15800	Rabbit	GESTIS
	inhalation (4 h) vapour	LC50	76 mg/l	Rat	GESTIS
7440-22-4	Silver Powder				
	oral	LD50 mg/kg	> 2000	Rat	Manufacturer
	xylene				
	oral	LD50 mg/kg	3523	Rat	Manufacturer
	dermal	LD50 mg/kg	2000	Rabbit	Manufacturer
	inhalation (4 h) vapour	LC50 mg/l	29000	Rat	Manufacturer
71-36-3	butan-1-ol; n-butanol				
	oral	LD50 mg/kg	2292	Rat	Manufacturer
	dermal	LD50 mg/kg	3430	Rabbit	Manufacturer
	inhalation vapour	LC50 mg/l	17000	Rat	Manufacturer

##### Irritation and corrosivity

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Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

#### Sensitising effects

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

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

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

#### STOT-single exposure

May cause drowsiness or dizziness. (1-methoxy-2-propanol; monopropylene glycol methyl ether; acetone; propan-2-one; propanone)

#### STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

#### Aspiration hazard

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

#### Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## SECTION 12: Ecological information

### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	Acute fish toxicity	LC50 >4000 mg/l	96 h	Leuciscus idus (golden orfe)	Manufacturer	
	Acute crustacea toxicity	EC50 23300 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50 8300 mg/l	96 h		GESTIS	
	Acute algae toxicity	ErC50 7200 mg/l	96 h		GESTIS	
	Acute crustacea toxicity	EC50 8450 mg/l	48 h	Daphnia magna (Big water flea)	GESTIS	
	Algae toxicity	NOEC 530 mg/l	8 d	Microcystis aeruginosa	Manufacturer	
	Crustacea toxicity	NOEC 2212 mg/l	28 d	Daphnia magna (Big water flea)	Manufacturer	
	xylene					
	Acute fish toxicity	LC50 13,5 mg/l	96 h		Manufacturer	
	Acute crustacea toxicity	EC50 7,4 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
71-36-3	butan-1-ol; n-butanol					
	Acute fish toxicity	LC50 1376 mg/l	96 h		Manufacturer	

### 12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-64-1	acetone; propan-2-one; propanone			
	OECD 301B	90 ± 2,2%	28	Manufacturer
	Readily biodegradable (according to OECD criteria).			

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	0,43
67-64-1	acetone; propan-2-one; propanone	-0,24

#### BCF

CAS No	Chemical name	BCF	Species	Source
7440-22-4	Silver Powder	70	Cyprinus carpio (Common Carp)	

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

#### Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

##### List of Wastes Code - residues/unused products

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

##### List of Wastes Code - used product

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other hazardous substances; hazardous waste

##### List of Wastes Code - contaminated packaging

150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

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**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0  
Transport category: 2  
Tunnel restriction code: D

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2  
**14.4. Packing group:** -  
Hazard label: 2.1



Classification code: 5F  
Special Provisions: 190 327 344 625  
Limited quantity: 1 L  
Excepted quantity: E0

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS  
**14.3. Transport hazard class(es):** 2.1  
**14.4. Packing group:** -  
Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959  
Limited quantity: 1000 mL  
Excepted quantity: E0  
EmS: F-D, S-U

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 1950  
**14.2. UN proper shipping name:** AEROSOLS, FLAMMABLE  
**14.3. Transport hazard class(es):** 2.1

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**14.4. Packing group:**

-

Hazard label:

2.1



Special Provisions:

A145 A167 A802

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y203

Excepted quantity:

E0

IATA-packing instructions - Passenger:

203

IATA-max. quantity - Passenger:

75 kg

IATA-packing instructions - Cargo:

203

IATA-max. quantity - Cargo:

150 kg

**14.6. Special precautions for user**

Warning: Flammable gases.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 75

Information according to 2012/18/EU  
(SEVESO III):

E1 Hazardous to the Aquatic Environment

Additional information:

P3a

**Additional information**

Aerosol Directive (75/324/).

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

2 - obviously hazardous to water

**15.2. Chemical safety assessment**

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

**SECTION 16: Other information****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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

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UN: United Nations  
 DNEL: Derived No Effect Level  
 DMEL: Derived Minimal Effect Level  
 PNEC: Predicted No Effect Concentration  
 ATE: Acute toxicity estimate  
 LL50: Lethal loading, 50%  
 EL50: Effect loading, 50%  
 EC50: Effective Concentration 50%  
 ErC50: Effective Concentration 50%, growth rate  
 NOEC: No Observed Effect Concentration  
 BCF: Bio-concentration factor  
 PBT: persistent, bioaccumulative, toxic  
 vPvB: very persistent, very bioaccumulative  
 RID: Regulations concerning the international carriage of dangerous goods by rail  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation  
 intérieures)  
 EmS: Emergency Schedules  
 MFAG: Medical First Aid Guide  
 ICAO: International Civil Aviation Organization  
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
 IBC: Intermediate Bulk Container  
 VOC: Volatile Organic Compounds  
 SVHC: Substance of Very High Concern  
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>  
 For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety  
 assessment, chapter R.20 (Table of terms and abbreviations).

#### Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

#### Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.

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H410 Very toxic to aquatic life with long lasting effects.  
EUH066 Repeated exposure may cause skin dryness or cracking.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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