

## CF 70 H722 E-2

Version number: SDSCH 1.0

Date of compilation: 2024-02-16

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

#### 1.1 Product identifier

Trade name **CF 70 H722 E-2**

Other names or synonyms x = Percentage of alloy in paste  
Y = Particle size (0, 1, 2)

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

Sector(s) of use Brazing paste  
Welding and soldering product  
Welding and soldering products (with flux coatings or flux cores), flux products  
Industrial uses  
Professional uses

Product category/ies laboratory chemicals

Process category industrial use of substances in closed systems  
use in batch and other process (synthesis) where opportunity for exposure arises  
mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)  
transfer of substance or preparation (charging/discharging) from/to vessels/large containers at facilities  
roller application or brushing  
production of preparations or articles by tableting, compression, extrusion, pelletisation  
low energy manipulation of substances bound in materials and/or articles  
open processing and transfer operations with minerals/metals at elevated temperature  
handling of solid inorganic substances at ambient temperature

Environmental release category/ies industrial use resulting in manufacture of another substance (use of intermediates)  
industrial use resulting in inclusion into or onto a matrix

Uses advised against Do not use for private purposes (household).

#### 1.3 Details of the supplier of the safety data sheet

C. HAFNER & HILDERBRAND SA  
Route de la Galaise 11b  
1228 Plan-les-Ouates Genève  
PO Box: Switzerland

Telephone: +41 22 349 00 24  
Telefax: +41 22 349 02 81  
e-Mail: Info@hilderbrand.ch  
Website: www.hilderbrand.ch

Additional information

Manufacturer						
Country	Name	Postal code/city	Telephone	Telefax	Website	Opening hours
Switzerland	C. HAFNER & HILDERBRAND SA	1228 Plan-les-Ouates, Geneve	+41-22-349-0024	+41-22-349-0281	www.hilderbrand.ch	Mon - Thu 08:00 AM - 05:00 PM Fri 08:00 AM -

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Manufacturer						
Country	Name	Postal code/ city	Telephone	Telefax	Website	Opening hours
						04:00 PM

e-Mail quality@hilderbrand.ch

**1.4 Emergency telephone number**

Emergency information service This number is only for medical emergencies

Opening hours 24h/24h 7/7

Poison centre				
Country	Name	Postal code/ city	Telephone	Website
United Kingdom	NPIS UK		0344 892 0111	

**1.5 Additional relevant and available information** there is no additional information

**1.6 Remarks** there is no additional information

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard state- ment
3.7	reproductive toxicity	1B	Repr. 1B	H360FD
3.10	aspiration hazard	1	Asp. Tox. 1	H304
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

**2.2 Label elements**

Labelling

- Signal word danger

- Pictograms

GHS08, GHS09



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**- Hazard statements**

- H304 May be fatal if swallowed and enters airways.
- H360FD May damage fertility. May damage the unborn child.
- H410 Very toxic to aquatic life with long lasting effects.

**- Precautionary statements**

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P331 Do NOT induce vomiting.
- P391 Collect spillage.
- P405 Store locked up.
- P501 Dispose of contents/container to industrial combustion plant.

**- Hazardous ingredients for labelling** Boric acid

**2.3 Other hazards**

Material intended for fusion. During melting, it can produce noxious fumes if inhaled. May produce: pulmonary edema, irritation of the mucous membranes of the nose and throat.

**Results of PBT and vPvB assessment**

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .





**Endocrine disrupting properties**

Contains an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

**SECTION 3: Composition/information on ingredients**

**3.2 Mixtures**


Description of the mixture

Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Silver (< 1 mm)	CAS No 7440-22-4  EC No 231-131-3	25 – < 50	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
White Mineral Oil	CAS No 8042-47-5  EC No 232-455-8	10 – < 25	Asp. Tox. 1 / H304	
Copper	CAS No 7440-50-8  EC No 231-159-6  Index No 029-024-00-X	10 – < 25	Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	
Zinc	CAS No 7440-66-6  EC No 231-175-3  Index No 030-001-00-1	5 – < 10	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	

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Hazardous ingredients acc. to GHS				
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Boric acid	CAS No 10043-35-3  EC No 233-139-2  Index No 005-007-00-2	1 - < 5	Repr. 1B / H360FD	

**Remarks**

For full text of abbreviations: see SECTION 16

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label or safety data sheet where possible). In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water. Take off immediately all contaminated clothing.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Causes serious eye damage.

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

none

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media

Water, Foam, ABC-powder, Sand

Unsuitable extinguishing media

Water jet

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

none

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### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Wear self-contained breathing apparatus

## SECTION 6: Accidental release measures

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

For non-emergency personnel

Provision of sufficient ventilation. Remove persons to safety. Remove unequipped persons.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

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

Advice on how to contain a spill

Covering of drains, Take up mechanically

Advice on how to clean up a spill

Take up mechanically.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Personal protective equipment: see section 8. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- Specific notes/details

Dust deposits may accumulate on all deposition surfaces in a technical room. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

Managing of associated risks

- Explosive atmospheres

Removal of dust deposits. Store at temperatures not exceeding 25 °C.

Consideration of other advice

- Packaging compatibilities

Keep only in original container. Only packagings which are approved (e.g. acc. to ADR) may be used. Plastic packaging.

### 7.3 Specific end use(s)

See section 16 for a general overview.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Notation	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Source
EU	silver	7440-22-4		IOEL V		0.1					2000/39/EC
GB	silver	7440-22-4		WEL		0.01					EH40/2005
GB	copper	7440-50-8	dm	WEL		1		2			EH40/2005
GB	copper	7440-50-8	fume	WEL		0.2					EH40/2005

#### Notation

##### Ceiling-C

ceiling value is a limit value above which exposure should not occur

##### dm

as dusts and mists

##### fume

as fume

##### STEL

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

##### TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours  
time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Silver (< 1 mm)	7440-22-4	DNEL	0.1 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Copper	7440-50-8	DNEL	20 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	acute - systemic effects
Copper	7440-50-8	DNEL	137 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Copper	7440-50-8	DNEL	273 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects

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Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Zinc	7440-66-6	DNEL	83 mg/kg bw/day	human, dermal	worker (industry)	chronic - local effects
Zinc	7440-66-6	DNEL	83 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Zinc	7440-66-6	DNEL	5 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Boric acid	10043-35-3	DNEL	8.3 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
Boric acid	10043-35-3	DNEL	392 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

### Relevant PNECs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Silver (< 1 mm)	7440-22-4	PNEC	0.04 µg/l	aquatic organisms	freshwater	short-term (single instance)
Silver (< 1 mm)	7440-22-4	PNEC	0.86 µg/l	aquatic organisms	marine water	short-term (single instance)
Silver (< 1 mm)	7440-22-4	PNEC	0.025 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Silver (< 1 mm)	7440-22-4	PNEC	438.1 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Silver (< 1 mm)	7440-22-4	PNEC	438.1 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Silver (< 1 mm)	7440-22-4	PNEC	1.41 mg/kg	terrestrial organisms	soil	short-term (single instance)
Copper	7440-50-8	PNEC	7.8 µg/l	aquatic organisms	freshwater	short-term (single instance)
Copper	7440-50-8	PNEC	5.2 µg/l	aquatic organisms	marine water	short-term (single instance)
Copper	7440-50-8	PNEC	230 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Copper	7440-50-8	PNEC	87 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Copper	7440-50-8	PNEC	676 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Copper	7440-50-8	PNEC	65 mg/kg	terrestrial organisms	soil	short-term (single instance)
Zinc	7440-66-6	PNEC	20.6 µg/l	aquatic organisms	freshwater	short-term (single instance)
Zinc	7440-66-6	PNEC	6.1 µg/l	aquatic organisms	marine water	short-term (single instance)
Zinc	7440-66-6	PNEC	100 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Zinc	7440-66-6	PNEC	117.8 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)

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Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Zinc	7440-66-6	PNEC	56.5 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Zinc	7440-66-6	PNEC	35.6 mg/kg	terrestrial organisms	soil	short-term (single instance)
Boric acid	10043-35-3	PNEC	2.9 mg/l	aquatic organisms	freshwater	short-term (single instance)
Boric acid	10043-35-3	PNEC	13.7 mg/l	aquatic organisms	water	intermittent release
Boric acid	10043-35-3	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Boric acid	10043-35-3	PNEC	5.7 mg/kg	terrestrial organisms	soil	short-term (single instance)
Boric acid	10043-35-3	PNEC	2.9 mg/l	aquatic organisms	marine water	short-term (single instance)

### 8.2 Exposure controls

#### Appropriate engineering controls

Provision of sufficient ventilation.

#### Individual protection measures (personal protective equipment)

##### Eye/face protection

Wear eye/face protection. Follow norm EN 166.

##### Skin protection

Preventive skin protection (barrier creams/ointments) is recommended.

##### - Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374 and regulation (EU) Nr. 2016/425.

##### - Type of material

NR: natural rubber, latex, CR: chloroprene (chlorobutadiene) rubber, NBR: acrylonitrile-butadiene rubber, FKM: fluoroelastomer

##### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection. P3 (filters at least 99,95 % of airborne particles, colour code: White). Type: B (against inorganic gases and vapours, colour code: Grey).

##### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.



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### SECTION 9: Physical and chemical properties

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

Physical state	solid (waxy)
Colour	grey
Odour	odourless
Melting point/freezing point	730 °C
Boiling point or initial boiling point and boiling range	not determined
Flammability	not combustible but contains combustible materials
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	>1,059 °C (relative self-ignition temperature for solids)
Decomposition temperature	not relevant
pH (value)	not determined
Kinematic viscosity	not relevant

Vapour pressure	0.01 kPa at 20 °C
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Density	See technical data sheet
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Particle characteristics	no data available
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#### 9.2 Other information

Data are conclusive but not sufficient for classification.

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

**10.2 Chemical stability**

See below "Conditions to avoid".

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid**

Keep away from heat.

**Hints to prevent fire or explosion**

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

**SECTION 11: Toxicological information****11.1 Information on toxicological effects**

Data apply to the technically active substance. Test data are not available for the complete mixture.

**Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification acc. to GHS****Acute toxicity**

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful in contact with skin.

**Skin corrosion/irritation**

Shall not be classified as corrosive/irritant to skin.

**Serious eye damage/eye irritation**

Shall not be classified as seriously damaging to the eye or eye irritant.

**Respiratory or skin sensitisation**

Shall not be classified as a respiratory or skin sensitiser.

**Germ cell mutagenicity**

Shall not be classified as germ cell mutagenic.

**Carcinogenicity**

Shall not be classified as carcinogenic.

**Reproductive toxicity**

May damage the unborn child. May damage fertility.

**Specific target organ toxicity (STOT)**

Shall not be classified as a specific target organ toxicant.

**Specific target organ toxicity - single exposure**

The classification criteria for this hazard class are not met.

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### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

May be fatal if swallowed and enters airways.

## 11.2 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Silver (< 1 mm)	7440-22-4	LC50	1.2 µg/l	fish	96 h
Silver (< 1 mm)	7440-22-4	ErC50	2.52 µg/l	algae	72 h
Silver (< 1 mm)	7440-22-4	EC50	0.82 µg/l	algae	72 h
White Mineral Oil	8042-47-5	LL50	>100 mg/l	fish	96 h
Copper	7440-50-8	LC50	193 µg/l	fish	96 h
Zinc	7440-66-6	LC50	439 µg/l	fish	96 h
Zinc	7440-66-6	EC50	1,833 µg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Silver (< 1 mm)	7440-22-4	EC50	0.8 µg/l	aquatic invertebrates	7 d
Zinc	7440-66-6	LC50	330 µg/l	fish	95 h
Zinc	7440-66-6	EC50	7.1 mg/l	aquatic invertebrates	24 h

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Silver (< 1 mm)	7440-22-4	70		
Zinc	7440-66-6	60,960		
Boric acid	10043-35-3		-1.09 (pH value: 7.5, 22 °C)	

### 12.4 Mobility in soil

Data are not available.

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### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

The mixture contains substance(s) with an endocrine disrupting potential.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Assign arising waste to a waste code according to the national list of waste.

## SECTION 14: Transport information

### 14.1 UN number or ID number

ADR/RID	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

### 14.2 UN proper shipping name

ADR/RID	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name (hazardous ingredients)	Silver (< 1 mm), Copper

### 14.3 Transport hazard class(es)

ADR/RID	9
IMDG-Code	9
ICAO-TI	9

### 14.4 Packing group

ADR/RID	III
IMDG-Code	III
ICAO-TI	III

### 14.5 Environmental hazards

hazardous to the aquatic environment

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Environmentally hazardous substance (aquatic environment) Silver (< 1 mm), Copper

**14.6 Special precautions for user**


Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

**Information for each of the UN Model Regulations**


**Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information**

Classification code	M6
Danger label(s)	9, fish and tree
	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-
Hazard identification No	90
Emergency Action Code	3Z

**Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information**

Classification code	M6
Danger label(s)	9, fish and tree
	
Environmental hazards	yes (hazardous to water)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Hazard identification No	90

**International Maritime Dangerous Goods Code (IMDG) - Additional information**

Marine pollutant	yes (hazardous to the aquatic environment) (Silver (< 1 mm))
Danger label(s)	9, fish and tree
	
Special provisions (SP)	274, 335, 969

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Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A

**International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information**

Environmental hazards	YES (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree



Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

**SECTION 15: Regulatory information**

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

**Relevant provisions of the European Union (EU)**

**Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)**

none of the ingredients are listed

**Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

Pollutant release and transfer registers (PRTR)			
Name of substance	CAS No	Remarks	Threshold for releases to air (kg/year)
Zinc	7440-66-6	(8)	200
Copper	7440-50-8	(8)	100

Legend

(8) All metals shall be reported as the total mass of the element in all chemical forms present in the release

**Water Framework Directive (WFD)**

List of pollutants (WFD)			
Name of substance	CAS No	Listed in	Remarks
Silver (< 1 mm)		a)	
Boric acid		a)	
Zinc		a)	
Copper		a)	

Legend

a) Indicative list of the main pollutants

**Regulation on persistent organic pollutants (POP)**

none of the ingredients are listed

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### National regulations (GB)

#### List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

Substance of Very High Concern (SVHC) acc. to GB REACH and HSE			
Name of substance	CAS No	Listed in	Remarks
Boric acid	10043-35-3	Candidate list	Repr. A57c

#### Legend

Candidate list Substances meeting the criteria referred to in Article 57 and for eventual inclusion in Annex XIV list

Repr. A57c Toxic for reproduction (Article 57c)

### Restrictions according to GB REACH, Annex 17

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
CF 70 H722 E-2	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3
CF 70 H722 E-2	flammable / pyrophoric		40
Boric acid	toxic for reproduction		30

### National inventories

Country	Inventory	Status
EU	REACH Reg.	all ingredients are listed

#### Legend

REACH Reg. REACH registered substances

## 15.2 Chemical safety assessment

### SECTION 16: Other information

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value

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Abbr.	Descriptions of used abbreviations
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
HSE	Health and Safety Executive
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
log KOW	n-Octanol/water
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Repr.	Reproductive toxicity



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Abbr.	Descriptions of used abbreviations
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H304	May be fatal if swallowed and enters airways.
H360FD	May damage fertility. May damage the unborn child.
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.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.