

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

### 1.1. Product identifier

Product form : Mixture  
Trade name : μ- dIFe 7 No-Clean, Lead Free Ball Dip Paste  
Product code : SDP7\* (SAC305)



(\* All packaging included)

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use  
Industrial/Professional use spec : Industrial  
Use of the substance/mixture : Solder paste

Title	Use descriptors
Industrial uses: Uses of substances as such or in preparations* at industrial sites	SU0, SU14, PC7, PC38

#### 1.2.2. Uses advised against

No additional information available

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

Interflux® Electronics nv  
Eddastraat 51  
9042 Gent - BELGIUM  
T +32 9 2514959  
[reach@interflux.com](mailto:reach@interflux.com) - [www.interflux.com](http://www.interflux.com)

### 1.4. Emergency telephone number

Emergency number : ++1-703-527-3887 (CHEMTREC)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) no 1272/2008 (CLP)

Serious eye damage/eye irritation, Category 2 H319  
Skin sensitisation, Category 1 H317

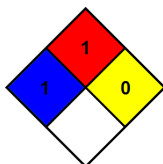
Full text of H statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### Other information

NFPA-code : 1-1-0  
:



### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) : Warning  
Hazardous ingredients : colophony  
Hazard statements (CLP) : H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
Precautionary statements (CLP) : P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

EUH-statements : EUH208 - Contains colophony. May produce an allergic reaction.  
UFI : In progress

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Other hazards not contributing to the classification : The product is not hazardous as supplied nor is it hazardous when handled under normal conditions. This product may become hazardous in use and the information in this data sheet reflects the hazards associated with solder operations.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) no 1272/2008 (CLP)
tin	(CAS N°) 7440-31-5 (EC N°) 231-141-8 (REACH-no) 01-2119486474-28	*)	Not classified
colophony	(CAS N°) 8050-09-7 (EC N°) 232-475-7 (EC Index-No.) 650-015-00-7 (REACH-no) 01-2119480418-32	10-20	Skin Sens. 1, H317
2-(2-butoxyethoxy)ethanol	(CAS N°) 112-34-5 (EC N°) 203-961-6 (EC Index-No.) 603-096-00-8 (REACH-no) 01-2119475104-44	6-9	Eye Irrit. 2, H319
silver, powder	(CAS N°) 7440-22-4 (EC N°) 231-131-3 (REACH-no) 01-2119555669-21	*)	Aquatic Acute 1, H400 (M=1000)
copper	(CAS N°) 7440-50-8 (EC N°) 231-159-6 (REACH-no) 01-2119480154-42	*)	Aquatic Acute 1, H400

Full text of H-statements: see section 16

Alloy	Tin % wt	Silver % wt	Copper % wt
Sn99,3Cu0,7	Rest	-	0,7±0.1
Sn96,5Ag3Cu0,5	Rest	3,0±0.2	0,5±0.1
Sn95,5Ag3,8Cu0,7	Rest	3,8±0.2	0,7±0.1
Sn96,5Ag4Cu0,5	Rest	4,0±0.2	0,5±0.1

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.  
First aid measures after skin contact : Take victim to a doctor if irritation persists. After contact with skin, wash immediately with plenty of warm water and soap.  
First aid measures after eye contact : Rinse immediately with plenty of water. Take victim to an ophthalmologist if irritation persists.  
First aid measures after ingestion : Immediately after ingestion: give lots of water to drink. Victim is fully conscious: immediately induce vomiting. Consult a doctor/medical service if you feel unwell.

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

Symptoms/injuries after inhalation : Provide local exhaust or general room ventilation to minimize mist and/or vapour concentrations.  
Symptoms/effects after skin contact : Mild skin irritation. Not irritating.  
Symptoms/effects after eye contact : Irritation of the eye tissue.

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

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Extinguishing media. Carbon dioxide. Dry chemical powder. foam.  
 Unsuitable extinguishing media : Never use water near molten metal.

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

Fire hazard : DIRECT FIRE HAZARD: Non combustible.  
 Reactivity : Molten metal reacts violently with oxidising agents.

#### 5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.  
 Protection during firefighting : Heat/fire exposure: compressed air apparatus (EN 136 + EN 137).

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Protective equipment : Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).  
 Emergency procedures : Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash contaminated clothes.

##### 6.1.2. For emergency responders

No additional information available

#### 6.2. Environmental precautions

Do not discharge into drains or the environment.

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

Methods for cleaning up : Carefully collect the spill/leftovers. Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone.  
 Other information : Upon burning: formation of metallic fumes/vapours.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Vapours produced during soldering operations.  
 Precautions for safe handling : Avoid breathing fume. Work under local exhaust/ventilation. Wash hands immediately after handling the product.  
 Hygiene measures : Always wash hands and face immediately after handling this product, and once again before leaving the workplace.

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

Maximum storage period : 6 months  
 Storage temperature : 3-10 °C  
 Storage area : Store in a cool area. Let the solder paste reach room temperature prior to opening the packaging.

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

REACH Disclaimer:  
 This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number).

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

tin (7440-31-5)

#### EU - Occupational Exposure Limits

IOELV TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
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<b>tin (7440-31-5)</b>	
<b>Belgium - Occupational Exposure Limits</b>	
Limit value (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
<b>Netherlands - Occupational Exposure Limits</b>	
Grenswaarde TGG 8H (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (Inhalable fraction)
<b>silver, powder (7440-22-4)</b>	
<b>EU - Occupational Exposure Limits</b>	
IOELV TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>Belgium - Occupational Exposure Limits</b>	
Limit value (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>France - Occupational Exposure Limits</b>	
VME (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>Netherlands - Occupational Exposure Limits</b>	
Grenswaarde TGG 8H (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>United Kingdom - Occupational Exposure Limits</b>	
WEL TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH TWA (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
<b>copper (7440-50-8)</b>	
<b>Belgium - Occupational Exposure Limits</b>	
Limit value (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>
<b>France - Occupational Exposure Limits</b>	
VME (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>
VLE (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
<b>Netherlands - Occupational Exposure Limits</b>	
Grenswaarde TGG 8H (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup> (inhaleerbaar)
<b>United Kingdom - Occupational Exposure Limits</b>	
WEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>
WEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
<b>USA - ACGIH - Occupational Exposure Limits</b>	
ACGIH TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> 1 mg/m <sup>3</sup>
<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
<b>EU - Occupational Exposure Limits</b>	
IOELV TWA (mg/m <sup>3</sup> )	67.5 mg/m <sup>3</sup> (2-(2-Butoxyethoxy)ethanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
IOELV TWA (ppm)	10 ppm (2-(2-Butoxyethoxy)ethanol; EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
IOELV STEL (mg/m <sup>3</sup> )	101.2 mg/m <sup>3</sup> (2-(2-Butoxyethoxy)ethanol; EU; Short time value; Indicative occupational exposure limit value)
IOELV STEL (ppm)	15 ppm (2-(2-Butoxyethoxy)ethanol; EU; Short time value; Indicative occupational exposure limit value)

### 2-(2-butoxyethoxy)ethanol (112-34-5)

#### Belgium - Occupational Exposure Limits

Limit value (mg/m <sup>3</sup> )	67.5 mg/m <sup>3</sup> (2-(2-Butoxyéthoxy)éthanol; Belgium; Time-weighted average exposure limit 8 h)
Limit value (ppm)	10 ppm (2-(2-Butoxyéthoxy)éthanol; Belgium; Time-weighted average exposure limit 8 h)
Short time value (mg/m <sup>3</sup> )	101.2 mg/m <sup>3</sup> (2-(2-Butoxyéthoxy)éthanol; Belgium; Short time value)
Short time value (ppm)	15 ppm (2-(2-Butoxyéthoxy)éthanol; Belgium; Short time value)

#### France - Occupational Exposure Limits

VME (mg/m <sup>3</sup> )	67.5 mg/m <sup>3</sup> (2-(2-Butoxyéthoxy)éthanol; France; Time-weighted average exposure limit 8 h; VRI: Valeur réglementaire indicative)
VME (ppm)	10 ppm (2-(2-Butoxyéthoxy)éthanol; France; Time-weighted average exposure limit 8 h; VRI: Valeur réglementaire indicative)
VLE (mg/m <sup>3</sup> )	101.2 mg/m <sup>3</sup> (2-(2-Butoxyéthoxy)éthanol; France; Short time value; VRI: Valeur réglementaire indicative)
VLE (ppm)	15 ppm (2-(2-Butoxyéthoxy)éthanol; France; Short time value; VRI: Valeur réglementaire indicative)

#### Netherlands - Occupational Exposure Limits

Grenswaarde TGG 8H (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup> (2-(2-butoxyethoxy)ethanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Grenswaarde TGG 8H (ppm)	7.4 ppm (2-(2-butoxyethoxy)ethanol; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value)
Grenswaarde TGG 15MIN (mg/m <sup>3</sup> )	100 mg/m <sup>3</sup> (2-(2-butoxyethoxy)ethanol; Netherlands; Short time value; Public occupational exposure limit value)
Grenswaarde TGG 15MIN (ppm)	15 ppm (2-(2-butoxyethoxy)ethanol; Netherlands; Short time value; Public occupational exposure limit value)

#### United Kingdom - Occupational Exposure Limits

WEL TWA (mg/m <sup>3</sup> )	67.5 mg/m <sup>3</sup> 2-(2-Butoxyethoxy)ethanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
WEL TWA (ppm)	10 ppm 2-(2-Butoxyethoxy)ethanol; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
WEL STEL (mg/m <sup>3</sup> )	101.2 mg/m <sup>3</sup> 2-(2-Butoxyethoxy)ethanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)
WEL STEL (ppm)	15 ppm 2-(2-Butoxyethoxy)ethanol; United Kingdom; Short time value; Workplace exposure limit (EH40/2005)

#### USA - ACGIH - Occupational Exposure Limits

ACGIH TWA (ppm)	10 ppm (Diethylene glycol monobutyl ether; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Inhalable fraction and vapor)
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### colophony (8050-09-7)

#### France - Occupational Exposure Limits

VME (mg/m <sup>3</sup> )	0.1 mg/m <sup>3</sup>
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#### United Kingdom - Occupational Exposure Limits

WEL TWA (mg/m <sup>3</sup> )	0.05 mg/m <sup>3</sup>
WEL STEL (mg/m <sup>3</sup> )	0.15 mg/m <sup>3</sup>

### 8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses.



Hand protection : Wear suitable gloves.

Eye protection : Safety glasses (EN166).

Skin and body protection	: Protective clothing (EN 14605 or EN 13034).
Respiratory protection	: Work under local exhaust/ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.
Consumer exposure controls	: The need for personal protective equipment should be based on a workplace risk assessment for the particular use.

### SECTION 9: Physical and chemical properties

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

Physical state	: Solid
Appearance	: Viscous.
Colour	: Grey.
Odour	: Mild odour.
Odour threshold	: No data available
pH	: No data available
Melting point	: IEC-EN-61190-1-3: SAC305: 217°C-220°C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 168 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Sn96,5Ag3Cu0,5 - 70%: > 4g/cm <sup>3</sup>
Solubility	: Water: Insoluble
Partition coefficient n-octanol/water (Log Pow)	: No data available
Partition coefficient n-octanol/water (Log Kow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Molten metal reacts violently with oxidising agents.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

High temperatures. humid air.

#### 10.5. Incompatible materials

Keep away from oxidizing agents. Keep away from reducing agents/(strong) acids /(strong) bases.

#### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>tin (7440-31-5)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 15 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 4.75 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))

<b>silver, powder (7440-22-4)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value of similar product, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 15 day(s))
LC50 inhalation rat (mg/l)	> 5.16 mg/l (OECD 436: Acute inhalation toxicity-acute toxic class method, 4 h, Rat, Male / female, Experimental value, Inhalation (dust), 14 day(s))

<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
LD50 oral rat	5660 mg/kg (Rat)
LD50 dermal rabbit	2764 mg/kg (Rabbit; Experimental value; OECD 402: Acute Dermal Toxicity)
ATE CLP (oral)	5660 mg/kg bodyweight
ATE CLP (dermal)	2764 mg/kg bodyweight

<b>colophony (8050-09-7)</b>	
LD50 oral rat	2800 mg/kg bodyweight (Other, Rat, Male / female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
ATE CLP (oral)	2800 mg/kg bodyweight

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Not biodegradable and may therefore not be disposed in the environment.
Ecology - water	: Flux used for solder paste is readily biodegradable - Metals are not biodegradable and may therefore not be disposed in the environment

<b>tin (7440-31-5)</b>	
LC50 fish 1	> 12.4 µg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Lethal)
LC50 other aquatic organisms 1	10 mg/l (144 h, GAMMARUS SP.)
EC50 Daphnia 1	1.5 mg/l (504 h, DAPHNIA MAGNA)
EC50 other aquatic organisms 1	21.23 mg/l (96 h, TUBIFEX TUBIFEX)
LC50 fish 2	0.42 mg/l (672 h, SALMO GAIRDNERI/ ONCORHYNCHUS MYKISS, METAL ION)
LC50 other aquatic organisms 2	42 mg/l (48 h, DAPHNIA MAGNA)
EC50 other aquatic organisms 2	140.28 mg/l (48 h, TUBIFEX TUBIFEX, METAL ION)

<b>silver, powder (7440-22-4)</b>	
LC50 fish 1	1.2 µg/l (96 h, Pimephales promelas, Semi-static system, Fresh water, Experimental value, Silver ion)
ErC50 (algae)	0.285 µg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

<b>copper (7440-50-8)</b>	
LC50 fish 1	38.4 – 256.2 µg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Read-across)
EC50 Daphnia 1	3.8 – 118.5 µg/l (US EPA, 48 h, Daphnia magna, Static system, Fresh water, Weight of evidence)



<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
LC50 fish 1	1300 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Lepomis macrochirus; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	> 100 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

<b>colophony (8050-09-7)</b>	
LC50 fish 1	1 – 10 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	911 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	> 1000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Selenastrum capricornutum, Static system, Fresh water, Experimental value, GLP)

### 12.2. Persistence and degradability

<b>tin (7440-31-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

<b>silver, powder (7440-22-4)</b>	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

<b>copper (7440-50-8)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0.25 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	2.08 g O <sub>2</sub> /g substance
ThOD	2.173 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.11

<b>colophony (8050-09-7)</b>	
Persistence and degradability	Readily biodegradable in water.
Chemical oxygen demand (COD)	2.6 g O <sub>2</sub> /g substance

### 12.3. Bioaccumulative potential

<b>tin (7440-31-5)</b>	
Bioaccumulative potential	Not bioaccumulative.

<b>silver, powder (7440-22-4)</b>	
BCF fish 1	70 (30 day(s), Cyprinus carpio, Fresh water, Experimental value, Fresh weight)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>copper (7440-50-8)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
BCF fish 1	0.46 (BCF)
Partition coefficient n-octanol/water (Log Pow)	0.56 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>colophony (8050-09-7)</b>	
BCF other aquatic organisms 1	56.2 (BCFBAF v3.00, QSAR)
Partition coefficient n-octanol/water (Log Pow)	1.9 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

<b>tin (7440-31-5)</b>	
Surface tension	No data available (test not performed)



<b>tin (7440-31-5)</b>	
Ecology - soil	Adsorbs into the soil.
<b>silver, powder (7440-22-4)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>copper (7440-50-8)</b>	
Ecology - soil	Adsorbs into the soil.
<b>2-(2-butoxyethoxy)ethanol (112-34-5)</b>	
Surface tension	0.034 N/m (25 °C)
<b>colophony (8050-09-7)</b>	
Surface tension	0.078 N/m (20 °C, EU Method A.5: Surface tension)
Partition coefficient n-octanol/water (Log Koc)	0.8759 (log Koc, SRC PCKOCWIN v2.0, QSAR)
Ecology - soil	Highly mobile in soil.

### 12.5. Results of PBT and vPvB assessment

#### μ- dIFe 7 No-Clean, Lead Free Ball Dip Paste

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### tin (7440-31-5)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### silver, powder (7440-22-4)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### copper (7440-50-8)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### colophony (8050-09-7)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Do not discharge into the sewer. Do not discharge into surface water. Recycle/reuse.
Ecology - waste materials	: Do not discharge into surface water. Do not discharge into the sewer.
EURAL code	: 10 08 11 - dross and skimmings other than those mentioned in 10 08 10 15 01 10* - packaging containing residues of or contaminated by dangerous substances

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

### 14.1. UN number

UN-No. (ADR)	: Not applicable
UN-No. (IMDG)	: Not applicable
UN-No. (IATA)	: Not applicable
UN-No. (ADN)	: Not applicable
UN-No. (RID)	: Not applicable

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
Proper Shipping Name (IATA)	: Not applicable
Proper Shipping Name (ADN)	: Not applicable
Proper Shipping Name (RID)	: Not applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR) : Not applicable

#### IMDG

Transport hazard class(es) (IMDG) : Not applicable

#### IATA

Transport hazard class(es) (IATA) : Not applicable

#### ADN

Transport hazard class(es) (ADN) : Not applicable

#### RID

Transport hazard class(es) (RID) : Not applicable

### 14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Transport regulations (ADR) : Not subject

#### - Transport by sea

Transport regulations (IMDG) : Not subject

#### - Air transport

Transport regulations (IATA) : Not subject

#### - Inland waterway transport

No data available

#### - Rail transport

Transport regulations (RID) : Not subject

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Additional rules to be obtained at Interflux® Electronics NV

Remark:

Above mentioned regulations are in force at the moment of publication of this (SDS) safety data sheet. With reference to possible modifications in transport regulations of dangerous goods, we advise you to verify its validity at Interflux® Electronics NV.

## SECTION 15: Regulatory information

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

#### 15.1.1. EU Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

**15.1.2. National regulations**

**Germany**

Regulatory reference : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1)  
Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this preparation were carried out

**SECTION 16: Other information**

Other information : Intrastat code 3810 10 00.

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
EUH208	Contains colophony. May produce an allergic reaction.

Full text of use descriptors

PC38	Welding and soldering products, flux products
PC7	Base metals and alloys
SU0	Other
SU14	Manufacture of basic metals, including alloys

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

**DISCLAIMER**

The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or the accuracy of this information or the suitability of our products in any given situation. Users of our products should make their own tests to determine the suitability of each such product for their particular purposes. The products discussed are sold without such warranty, either expressed or implied.

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