

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

1.1. Product identifier

Product form : Mixture
 Trade name : Quick Flow QF 70 Lead-Free, Halide Free, No-Clean Solder Wire
 Product code : SWQF70* (available in SAC305/SAC387/Sn99,3Cu0,7/Sn99Ag0,3Cu0,7)

(* 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 : Reserved for industrial and professional use.
 Use of the substance/mixture : Solder wire

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Interflux® Electronics N.V.
 Eddastraat 51
 9042 GENT - Belgium
 T +32 9 2514959 - F +32 9 2514970
reach@interflux.com - www.interflux.com

1.4. Emergency telephone number

Emergency number : +32 9 251 49 59 (8u.00-17u.00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

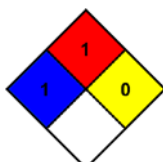
Not classified

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]

Precautionary statements (CLP) : P273 - Avoid release to the environment

2.3. Other hazards

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. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
tin	(CAS N°) 7440-31-5 (EC N°) 231-141-8 (REACH-no) 01-2119486474-28	*)	Not classified
silver	(CAS N°) 7440-22-4 (EC N°) 231-131-3 (REACH-no) 01-2119555669-21	*)	Not classified

Name	Product identifier	%	Classification according to Directive 67/548/EEC
copper	(CAS N°) 7440-50-8 (EC N°) 231-159-6 (REACH-no) 01-2119480154-42	*)	Not classified
Flux incorporated (rosin based)	-	2,2 - 3	Not classified
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
silver	(CAS N°) 7440-22-4 (EC N°) 231-131-3 (REACH-no) 01-2119555669-21	*)	Not classified
copper	(CAS N°) 7440-50-8 (EC N°) 231-159-6 (REACH-no) 01-2119480154-42	*)	Not classified
Flux incorporated (rosin based)	-	2,2 - 3	Not classified

*) Weight dependent on the respective alloy (see alloy overview)

Alloys	Tin % wt	Silver % wt	Copper % wt
Sn96,5Ag3Cu0,5	Rest	3,0±0.2	0,5±0.2
Sn95,5Ag3,8Cu0,7	Rest	3,8±0.2	0,7±0.2
Sn99,3Cu0,7	Rest	-	0,7±0.2
Sn99Ag0,3Cu0,7	Rest	0,3±0.1	0,7±0.2

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 : Lead-free solder alloys are not likely to have a harmful effect on the skin. Wash hands immediately after handling the product. In case of splash from molten metal, wash affected skin areas with copious amounts of running water. Further treatment of the burn. Soap may be used. Take victim to a doctor if irritation persists.
- 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 : Dilute stomach contents with water or milk. Do NOT induce vomiting. Ask for medical advice.

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

- Symptoms/injuries : Handle in accordance with good industrial hygiene and safety practice.
- Symptoms/injuries after skin contact : The melted product adheres to the skin and causes burns.
- Symptoms/injuries after eye contact : In case of splash from hot solder, irritation to the eyes and if not removed, may result in serious injury. Vapours produced during soldering operations can give slight 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 : D powder. Dry sand.
- Unsuitable extinguishing media : No water spray.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : None.
- Reactivity : Upon burning: formation of metallic fumes/vapours.

5.3. Advice for firefighters

- Protection during firefighting : Heat resistant gloves. Heat/fire exposure: compressed air/oxygen apparatus.
- Other information (fire fighting) : Massive metal and the oxides are not combustible.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Not applicable for solder wire.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : If melted: allow liquid to solidify before taking it up.

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 : 2 year

Storage temperature : Store at ambient temperature

Storage area : Store in a dry area.

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	IOELV TWA (mg/m ³)	2 mg/m ³
Belgium	Limit value (mg/m ³)	2 mg/m ³
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³
silver (7440-22-4)		
EU	IOELV TWA (mg/m ³)	0,1 mg/m ³
Belgium	Limit value (mg/m ³)	0,1 mg/m ³
France	VME (mg/m ³)	Argent (métallique),0.1 mg/m ³ ; France; Time-weighted average exposure limit 8 h; VRI: Valeur réglementaire indicative
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0,1 mg/m ³
The Netherlands	MAC TGG 8H (mg/m ³)	Zilver, metallisch,0.1 mg/m ³ ; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value
United Kingdom	WEL TWA (mg/m ³)	0,1 mg/m ³
copper (7440-50-8)		
Belgium	Limit value (mg/m ³)	0,2 mg/m ³
France	VME (mg/m ³)	Cuivre (fumées),0.2 mg/m ³ ; France; Time-weighted average exposure limit 8 h; VL: Valeur non réglementaire indicative
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0,2 mg/m ³
The Netherlands	MAC TGG 8H (mg/m ³)	Koper en anorganische koperverbindingen (inhaleerbaar),0.1 mg/m ³ ; Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value; inhalable
United Kingdom	WEL TWA (mg/m ³)	0,2 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	2 mg/m ³

8.2. Exposure controls

Personal protective equipment : Safety glasses. Gloves. Heat resistant gloves if handling hot metal.



Hand protection : The selected protective gloves must meet the specifications of EU Directive 89/686/EEC and EN 374, derived therefrom.

Eye protection : Safety glasses.

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	: Solid wire.
Colour	: Silvery-white to grey.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Melting point	: IEC-EN-61190-1-3: Sn96,5Ag3Cu0,5: 217°C-220°C/ Sn95,5Ag3,8Cu0,7: 217°C-226°C/ Sn99,3Cu0,7: 227°C/ Sn99Ag0.3Cu0.7: 217°C-227°C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: (Flux) 200 °C
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: Non flammable.
Explosive limits	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Sn96,5Ag3Cu0,5: 7.5g/cm ³ /Sn95,5Ag3,8Cu0,7: 7.5g/cm ³ / Sn99,3Cu0,7: 7.2g/cm ³ / Sn99Ag0.3Cu0.7: 7.3g/cm ³
Solubility	: Water: Insoluble
Log Pow	: No data available
Log Kow	: No data available
Self 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

Upon burning: formation of metallic fumes/vapours.

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. Will emit toxic metallic oxides.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Tin, copper and silver compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

silver (7440-22-4)

LD50 oral rat	> 10000 mg/kg (Rat)
LD50 dermal rat	> 2000 mg/kg (Rat)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The solder wire is not biodegradable and may therefore not be disposed in the environment.
Ecology - water : Flux used for solder wire is readily biodegradable

tin (7440-31-5)

LC50 fishes 1	0,42 mg/l (672 h; Salmo gairdneri (Oncorhynchus mykiss); Metal ion)
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)

12.2. Persistence and degradability

tin (7440-31-5)

Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

silver (7440-22-4)

Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

copper (7440-50-8)

Persistence and degradability	Biodegradability: not applicable. Biodegradability in soil: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

tin (7440-31-5)

BCF fish 1	< 0,00036 (Pisces; Dry weight)
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silver (7440-22-4)

Bioaccumulative potential	Not bioaccumulative.
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copper (7440-50-8)

Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

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.
Waste 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. Recycle/reuse. LWCA (the Netherlands): KGA category 05.

SECTION 14: Transport information

No dangerous good in sense of transport regulations

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 candidate substance

EURAL code : 10 08 11

15.1.2. National regulations

Storage class (LGK) : LGK 13 - Non-combustible solids

15.2. Chemical safety assessment

Chemical safety assessments for substances in this preparation were carried out

SECTION 16: Other information

Other information : Intrastat code 8311 90 00.

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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