

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

1.1. Product identifier

Product form : Mixture
 Trade name : IF 14-10 Leaded, Halide Free, No-Clean Solder Wire
 Product code : SW10* (Sn63)
 (* 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

Title	Use descriptors
Manufacture of basic metals, including alloys	SU3, SU10, 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 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 : ++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)

Lact. H362
 Repr. 1A H360
 STOT RE 1 H372

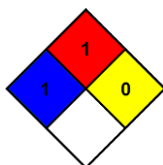
Full text of hazard classes and H-statements : see section 16

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) : 
 GHS08

Signal word (CLP) : Danger
 Hazardous ingredients : lead, in massive state
 Hazard statements (CLP) : H360 - May damage fertility or the unborn child
 H362 - May cause harm to breast-fed children
 H372 - Causes damage to organs through prolonged or repeated exposure
 Precautionary statements (CLP) : P263 - Avoid contact during pregnancy and while nursing
 P270 - Do not eat, drink or smoke when using this product
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

EUH-statements : EUH201A - Warning! Contains lead

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 : This product may become hazardous in use and the information in this data sheet reflects the hazards associated with solder operations. Increased danger of lead pollution if the metal is overheated or if the metal is oxidized (risk of formation of dust and fumes). Lead oxides are classified as toxic to reproduction (EC). Swallowing of metal alloys is harmful to health.

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
lead, in massive state	(CAS N°) 7439-92-1 (EC N°) 231-100-4 (REACH-no) 01-2119513221-59	*)	Repr. 1A, H360D Repr. 1A, H360FD Lact., H362 STOT RE 1 H372
flux incorporated	-	1.0 ±0.2	Not classified

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

Full text of H-statements: see section 16

Alloys	Tin % wt	Lead % wt	Silver	Copper
Sn63Pb37	63±0.5	Rest	-	

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 : In case of splash from molten metal, wash affected skin areas with copious amounts of running water. Further treatment of the burn.

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 : Do not induce vomiting. Give milk to drink. Immediately after ingestion: give lots of water to drink. Consult a doctor/medical service if you feel unwell.

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

Symptoms/effects : Handle in accordance with good industrial hygiene and safety practice.

Symptoms/effects after skin contact : The melted product adheres to the skin and causes burns.

Symptoms/effects 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.

Symptoms/injuries after ingestion : Symptoms similar to those listed under inhalation, as well damage to the kidneys.

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 : Never use water near molten metal.

5.2. Special hazards arising from the substance or mixture

Fire hazard : None.

Explosion hazard : DIRECT EXPLOSION HAZARD. No data available on direct explosion hazard. INDIRECT EXPLOSION HAZARD. No data available on indirect explosion hazard.

Reactivity : Upon burning: formation of metallic fumes/vapours.

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.
- Firefighting instructions : Dilute combustible/toxic gases/vapours with water spray. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.
- 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

- Protective equipment : Gloves. protective clothing. See "Material-Handling" to select protective clothing.
- Emergency procedures : Mark the danger area. No naked flames.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. 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 : Comply with the legal requirements. Avoid breathing fume. Wash hands immediately after handling the product. Observe very strict hygiene - avoid contact. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection.
- 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 : Unlimited
- Storage temperature : Store at ambient temperature
- Storage area : Store at ambient temperature. 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

lead, in massive state (7439-92-1)

EU	IOELV TWA (mg/m ³)	15 mg/m ³ (Inorganic lead and its compounds; EU; Time-weighted average exposure limit 8 h; Binding occupational exposure limit value)
Belgium	Limit value (mg/m ³)	0.15 mg/m ³ (Plomb inorg. (poussières et fumées) (en Pb); Belgium; Time-weighted average exposure limit 8 h)
France	VME (mg/m ³)	0.1 mg/m ³ (Plomb métallique et composés, en Pb; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0.05 mg/m ³ (Lead; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
United Kingdom	WEL TWA (mg/m ³)	15 mg/cm ³ Lead other than lead alkyls; United Kingdom; Time-weighted average exposure limit 8 h; Occupational exposure limit (Control of lead at work)

tin (7440-31-5)		
EU	IOELV TWA (mg/m ³)	2 mg/m ³ (Tin (inorganic compounds as Sn); EU; Time-weighted average exposure limit 8 h; Indicative occupational exposure limit value)
Belgium	Limit value (mg/m ³)	2 mg/m ³ (Etain (métal); Belgium; Time-weighted average exposure limit 8 h)
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (Tin Metal; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

8.2. Exposure controls

Appropriate engineering controls : Solder alloys containing lead do not give lead fumes at normal soldering temperatures, only at t° above 500°C. Provide local exhaust or general room ventilation.

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



Hand protection : The selected protective gloves must meet the specifications of EU Directive 89/686/EEC and EN 374, derived therefrom. In case of repeated or prolonged contact wear gloves. Wear suitable gloves.

Eye protection : In case of risky circumstances: safety glasses or face shield.

Skin and body protection : Wear suitable protective clothing and gloves.

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.

Other information : Do not eat, drink or smoke when using this product. Observe strict hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

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: Sn63Pb37: 183°C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: (Flux) 170 °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	: Sn63Pb37: 8.4g/cm ³
Solubility	: Water: Insoluble
Log Pow	: No data available
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

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

Slightly reactive with oxidizing agents and strong acids.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

lead, in massive state (7439-92-1)

LD50 oral rat	> 2000 mg/kg bodyweight (Rat; Weight of evidence)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

tin (7440-31-5)

LD50 oral rat	> 2000 mg/kg bodyweight (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Experimental value)
LD50 dermal rat	> 2000 mg/kg bodyweight (Rat; Experimental value; OECD 402: Acute Dermal Toxicity)

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	: May cause harm to breast-fed children. May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Causes damage to organs through prolonged or repeated exposure.
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 - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006). TA-Luft Klasse 5.2.2/II.
Ecology - water	: No water pollutant (surface water). Maximum concentration in drinking water: 0.010 mg/l (lead) (Directive 98/83/EC).

tin (7440-31-5)

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

lead, in massive state (7439-92-1)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the substance available.
ThOD	Not applicable (inorganic)

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

12.3. Bioaccumulative potential

lead, in massive state (7439-92-1)	
Log Pow	0.73 (estimated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

tin (7440-31-5)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

IF 14-10 Leaded, Halide Free, No-Clean Solder Wire	
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

Other information : Ecological information is not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Ecology - waste materials	: Do not discharge into surface water. Do not discharge into the sewer. Recycle/reuse. Packaging containing residues of or contaminated by. dangerous substances. LWCA (the Netherlands): KGA category 05. Hazardous waste (91/689/EEC).
EURAL code	: 10 04 02* - dross and skimmings from primary and secondary production

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

VwVwS Annex reference : Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to VwVwS, Annex 4)

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

12th Ordinance Implementing the Federal Immission Control Act - 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 8311 90 00.

Full text of H- and EUH-statements:

Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Repr. 1A	Reproductive toxicity, Category 1A
Repr. 1A	Reproductive toxicity, Category 1A
Repr. 1A	Reproductive toxicity, Category 1A
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
H360	May damage fertility or the unborn child
H360D	May damage the unborn child
H360FD	May damage fertility. May damage the unborn child
H362	May cause harm to breast-fed children
H372	Causes damage to organs through prolonged or repeated exposure
EUH201A	Warning! Contains lead
PC38	Welding and soldering products, flux products
PC7	Base metals and alloys
SU10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU14	Manufacture of basic metals, including alloys
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites

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.

Copyrights reserved to Interflux® Electronics NV