



## SAFETY DATA SHEET

This Safety Data Sheet complies with Regulation (EC) No 1907/2006, 1272/2008, ISO 11014-1 and ANSI Z400.1

### ESAB Firepower 1102 solder wire

Version number: 1

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

### 1.1. Product identifier

**Trade name** ESAB Firepower 1102 solder wire

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

**Use** soldering for electronic parts and components

**Not suitable for use in** Not Available

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

**SDS created by** TDST

**Supplier** ESAB AB

**Street address** Box 8004  
402 77 Göteborg  
Sweden

**Telephone** +46 31 509000

**Email** sds.esab@esab.se

**Web site** www.esab.com

### 1.4. Emergency telephone number

**Emergency phone number** +46 31 509000

**Available outside office hours** No

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008, Annex VI

**Classification** Hazardous to the aquatic environment — Acute hazard category 2  
Respiratory sensitisation, hazard category 1, sub-category 1B  
Reproductive toxicity, hazard category 2  
Specific Target Organ Toxicity — Repeated exposure, hazard category 2  
Acute toxicity, inhalation, hazard category 1

**Hazard statements** H351, H360, H362, H372

### 2.2. Label elements

#### GHS labeling of the substance (in accordance with Regulation (EC) No 1272/2008, Annex VI)

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### Pictogram



### Signal word

Danger

### Hazard statements

H351 Suspected of causing cancer.  
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.

### Precaution statements

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P263 Avoid contact during pregnancy/while nursing.  
P264 Wash hands and other parts of the body thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P308 + P313 IF exposed or concerned: Get medical advice/attention.  
P314 Get medical advice/attention if you feel unwell.  
P405 Store locked up.  
P501 Dispose of contents/container to according to local regulations.

### 2.3. Other hazards

Not applicable

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS No. EC No.	Concentration	Classification	R-phrase H-phrase
Lead	7439-92-1 231-100-4	57 - 60%	- STOT RE 1	- H351, H360, H362, H372
Tin	7440-31-5 231-141-8	39 - 40%	- -	- -
Water soluble organic substance	Business secret -	2 - 2,5%	- -	- -

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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<b>Inhalation</b>	If breathing has stopped, perform artificial respiration and obtain medical assistance immediately! If breathing is difficult, provide fresh air and call physician.
<b>Skin contact</b>	Wash affected skin with water and mild soap.
<b>Eye contact</b>	Rinse opened eye for several minutes under running water. Remove contact lenses. If symptoms persist, consult a doctor.
<b>Ingestion</b>	Induce vomiting if person is conscious. Obtain medical attention.

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

Inhalation may damage respiratory tract

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

Let medical staffs know involved matter, to take measures to protect themselves.

Other

<b>Information to rescue personnel</b>	Provide general measures, according to the treatment of symptoms
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	dry chemical, carbon dioxide, sandy soil
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<b>Unsuitable extinguishing media</b>	Once-through water
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### 5.2. Special hazards arising from the substance or mixture

Heated to break down, or under the condition of fire, will release carbon monoxide, carbon dioxide, aliphatic aldehydes.

### 5.3. Advice for firefighters

Not applicable

## SECTION 6: Accidental release measures

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

Ensure adequate ventilation. Avoiding contact with eye and skin, and inhalation

### 6.2. Environmental precautions

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

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

Not applicable

### 6.4. Reference to other sections

Not applicable

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Preventive handling precautions

Develop healthy habit, avoid contact with skin and eyes. Washing after handling, equipped personal protection device. Washing hands and avoiding inhalation.

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

Far away from fire source, strong acid and alkali, Store in Dry and cool space

### 7.3. Specific end use(s)

Not applicable

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits

Use industrial hygiene monitoring equipment to ensure that exposure does not exceed applicable national exposure limits. The following limits can be used as guidance. Unless noted, all values are for 8 hour time weighted averages (TWA).

#### National occupational exposure limits

Ingredient	CAS no.	EC No.	Exposure limit mg/m <sup>3</sup> -ppm		Short-term exposure limit mg/m <sup>3</sup> -ppm		Remark	Source	Year
Tin	7440-31-5	231-14-1-8	2	-	-	-	as Sn	OSHA	2016
Lead	7439-92-1	231-10-0-4	0,05	-	-	-	-	OSHA	2016
Water soluble organic substance	Business secret	-	-	-	-	-	-	-	-

### 8.2. Exposure controls

#### Technical precaution measures

According to good industrial hygiene and safety practice, wash hands after handling or in break.

#### Eye / face protection

May flash or contact eyes, please wear glasses

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**Other skin protection** Please in anti-static overalls

**Respiratory protection** Avoid inhalation of steam, please wear mask

### Other

sanitary measures: Before break and after handling washing hands immediately. Operation based on good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	silvery Solid wire
<b>Appearance, colour</b>	Not applicable
<b>Appearance, physical state</b>	Solid
<b>Auto-ignition temperature</b>	Not Available
<b>Boiling point</b>	Not Available
<b>Boiling range</b>	Not Available
<b>Decomposition temperature</b>	Not applicable
<b>Density</b>	9.3g/cm <sup>3</sup> at 20°C
<b>Evaporation rate</b>	Not Available
<b>Explosive properties</b>	Not applicable
<b>Flammability (solid, gas)</b>	Not applicable
<b>Flash point</b>	Not applicable
<b>Initial boiling point and boiling range</b>	Not Available
<b>Melting point / freezing point</b>	238/183°C
<b>molecular formula</b>	Not Available
<b>molecular weight</b>	Not Available
<b>Odour</b>	Not applicable
<b>Odour treshold</b>	Not applicable
<b>Oxidising properties</b>	Not applicable

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<b>Partition coefficient: n-octanol / water</b>	Not applicable
<b>pH value</b>	Not Available
<b>Relative density</b>	Not applicable
<b>Solubility</b>	Not Available
<b>Solubility in water</b>	Insoluble in water
<b>Surface tension</b>	Not Available
<b>Upper / lower flammability or explosive limits</b>	Not applicable
<b>Vapour density</b>	Not applicable
<b>Vapour pressure</b>	Not applicable
<b>Viscosity</b>	Not Available

### 9.2. Other information

Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Not applicable

### 10.2. Chemical stability

**Chemical stability** Under the condition of normal operation and storage stability

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No hazardous reaction under normal use

### 10.4. Conditions to avoid

**Conditions to avoid** High temperature

### 10.5. Incompatible materials

**Incompatible materials** strong acids strong alkalis

### 10.6. Hazardous decomposition products

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### Hazardous decomposition products

Carbonic oxide, carbon dioxide, aliphatic aldehydes

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Information on toxicological effects

Not Available

#### acute toxicity

Not applicable

#### skin corrosion/irritation

Not classified

#### serious eye damage/irritation

Not classified

#### Respiratory/skin sensitization

Not classified

#### germ cell mutagenicity

Not classified

#### Genotoxicity

Not applicable

#### carcinogenicity

Not classified

#### reproductive toxicity

Not classified

#### STOT-single exposure

Not classified

#### STOT-repeated exposure

Not classified

#### Aspiration hazard

Not applicable

#### LD50 Oral

rat 5mg/kg (IUCLID)

#### LD50 Dermal

Not Available

#### LC50 Inhalation

rat 40000 ppm 4 hr. (RTECS)

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute fish toxicity

Not Available

#### Acute algae toxicity

Not Available

### 12.2. Persistence and degradability

#### Persistence and degradability

Not Available

### 12.3. Bioaccumulative potential

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**Bioaccumulative potential** Not Available

### 12.4. Mobility in soil

**Mobility** Not Available

### 12.5. Results of PBT and vPvB assessment

Not applicable

### 12.6. Other adverse effects

**Other adverse effects** Not Available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal considerations** According to local regulation

**Packaging** Not Available

## SECTION 14: Transport information

### 14.1. UN number

Not applicable

### 14.2. UN proper shipping name

Not applicable

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

**Special precautions for user** See 2.2

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

Not applicable



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### SECTION 15: Regulatory information

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

##### Other regulations, limitations and legal regulations

if recorded by chemical catalogues of other countries

IECSC: No recorded

EINECS: No recorded

EPA TSCA: No recorded

DSL/NDL: No recorded

Below laws, regulations and standards, make relevant stipulation for safe handling, storage, transportation, loading and unloading, classification and mark of chemicals.

the production safety law of the people's republic of china

the occupational disease prevention law of the people's republic of china

the environmental protection law of the people's republic of china

Hazardous chemical materials safety management regulation

Safety production license

#### 15.2. Chemical safety assessment

Not applicable

##### Other

Dispose should be accord with relevant law and regulation

### SECTION 16: Other information

##### Changes to previous revision

All information based on our current date, the SDS (the chemical safety data sheet) is only for this product.

##### Phrase meaning

STOT RE 1 - Specific Target Organ Toxicity — Repeated exposure, hazard category 1

H351 - Suspected of causing cancer.

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.

##### Other

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#### Additional information

ESAB requests the users of this product to study this Safety Data Sheet (SDS) and become aware of product hazards and safety information. To promote safe use of this product a user should: notify its employees, agents and contractors of the information on this SDS and any product hazards/safety information.

furnish this same information to each of its customers for the product.

request such customers to notify employees and customers for the same product hazards and safety information.

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