

Lead Free Solder Wire Data Sheet



Lawtons lead free soft solder is a lead free alloy developed for plumbing and industrial applications of potable water supplies, heating and gas installations.

Type of Alloy

Compliant to the European and international standard: EN-ISO 9453: 2014.

Alloy No. 402

Alloy Designation S-Sn97Cu3

Melting Temperature 220 eutectic

Packing

Format: solid solder wire. Diameters: 0,35mm to 6mm. Delivered in reels of 500gr

Composition

97% Tin 3% Copper

Hazards Identification

Eyes: Burns caused by the melted material **Skin:** Burns caused by the melted material

Ingestion: Not applicable. **Inhalation:** Evacuate to fresh air and seek medical attention

First Aid Measures

Eyes Flush immediately with water. Get dermatologist attention. **Skin** Wash with soap and water **Ingestion** Wash mouth with water and seek medical attention. **Inhalation** Evacuate to fresh air and seek medical attention

Fire Fighting Measures

Specific hazards None, the product cannot explode or become inflamed.

Extinguishing media Not applicable

Fire-fighting equipment Not applicable

Accidental Released Measures

The supplied state of the material, present no risk of spillage.

Individual precautions - Use gloves to avoid burns in case of contact with the product.

Environmental protection precautions - Avoid the product entering into underground water pipes or ground waters.

Cleaning methods - Collect the product by mechanical means, avoiding dust formation. To remove completely, clean the surface with plenty of water.

Handling and Storage

Handling Whenever it is possible, avoid contact with skin. Use in well ventilated areas. Avoid direct inhalation of fumes. Preventive instructions against explosions and fires: no special requirements.

Storage - Requirements to be met by premises with storerooms and containers:

No special requirements.

Remarks for combined storage: not required

Further instructions about storage conditions:

Keep container tightly sealed.

Store in tightly closed and dry environments.

Storage class: VFD Class (Regulation on fluid fuels): deleted

Exposure Controls / Personal Protection

Additional instructions for the fitting of technical facilities: With the molten material: use in ventilated environments, or well equipped with fume extraction. Components with acceptable limit values that require monitoring at the workplace: the product does not contain any relevant quantities of substances which limit values must be controlled in the workplace.

Additional instructions: the current lists at the time of preparation were used as basis.

Personal protective equipment.

General protective and hygienic measures: Keep away from food, drinks and animal food. Wash hands before breaks and after work. Avoid contact with eyes and skin.

Respiratory protection: Use mask in poorly ventilated places.

Skin Protection: Gloves, only during the heating process.

Eye protection: Wear safety goggles to prevent potential spills during the operational phase.

Exposure limit values:

Substance Name VLA-ED (mg/m³) VLA-EC (mg/m³)

Tin	2	-
Copper	1	-

Physical and Chemical Properties

Appearance Solid

Colour Silver grey

Odour None

Flash point Not applicable

Combustion properties Non oxidant

Ignition Not applicable

Danger of explosion Not applicable

Relative density 7.33

Stability and Reactivity

Stability

Heat: heating may cause oxides steams and metal fumes.

Humidity: Keep the product dry.

Duration: Product not expired.

Toxicological Information

Acute toxicity Tin: 2 mg/ m³ Silver: 0,1 mg/ m³ Copper: 1 mg/ m³

Exposure ways Inhalation

Acute effects / symptoms During its heating may cause slight eye , nasal mucous and respiratory tract irritation.

Chronic effects Only after years of constant activity in unfavourable conditions, it may present risk of lung edema.

Ecological Information

General notes:

Level of damage to water 1 (self-classification): limited danger for water. Do not allow the undiluted product or in large quantities to infiltrate in ground waters, in water courses or in water pipes. It must not end up in sewers or drainage ditches.

Disposal Considerations

Storage and handling

Recommendation: Do not dispose of this substance with household waste. It should not reach sewer system.

Unclean packaging

Recommendation: Dispose of according to official regulations.

Information Concerning Transport

There is no special consideration in this regard.

Regulatory Information

Rating: This product is not subject to classification according to the criteria by the EC Directives on the Control of Dangerous Substances and Preparations.

R-Phrases: R 20/22 Harmful by inhalation and ingestion.

S-Phrases: S 2 Keep out of the reach of children.

S 13 Keep away from food, drinks and feed.

S 21 Do not smoke while using it.

S 26 In case of contact with eyes, rinse immediately with plenty water and consult a doctor.

WARNING: USE ONLY IN WELL VENTILATED AREAS

as when this product is heated may emit dangerous fumes for health if inhaled.