**Update:** 

**TECHNICAL DATA SHEET** 

Ref: Alloy

LEAD FREE Alloy

**Sn US** 

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Created on: 26/09/2023



### **GENERAL CHARACTERISTICS**:

Patented alloy based mainly on Tin that is usable in ultrasonic soldering process. Conform to RoHS 2011/65/EU directive.

#### **Benefits** :

- Soldering on aluminium, on ceramic, on glass (most unsolderable substrates).
- Environmentally friendly (fluxless process)
- Corrosion free
- Easy to use (no fumes extraction system needed)

#### Principle:

With this unique process, having an ultrasonic activated soldering tip, the addition of aggressive acid / fluxes is no longer required. The 'Ultrasonic Cavitation Phenomenon' cleans and removes the oxides on the surface of the substrate within the molten solder while soldering.

The high-energy ultrasonic vibration within the liquid solder breaks up the oxide layer on the surface of the substrate which has to be soldered. An immediate wetting of the cleaned surface is the result.

The solid soldering wire can be used in a lot of applications (especially when we want to prevent any electromigration).

## CHEMICAL CHARACTERISTICS:

Amount of Antimony: 0 - 10 %Amount of Tin: RestTin from first melting - Antimony with purity >99.9 %Extra element to allow the ultrasonic behaviourof the alloy

# PHYSICAL CHARACTERISTICS:

Melting point : 240°C – 245 °C Specific weight : 7.3 g/cm<sup>3</sup> Working temperature : depending on the application : mainly around 400 °C **Update:** 

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#### PACKAGING / STORAGE:

Solid solder wire	: Standard : 1 mm diameter and 1.5 mm diameter. On DIN or standard reel of 250g or 500g
Other product shape Storage	<ul> <li>: On request</li> <li>: In original packaging at room temperature away from inclemencies for 24 months.</li> </ul>

<u>SAFETY</u> :	ADDITIONAL INFORMATION:	
Material Safety Data Sheet available on request. Please consult it before use.	Our manufacturing processes have been subjected to FMECA analysis (equivalent of AMDEC in France). Quality Certificate available on request.	AFROR CERTIFICATION

We cannot anticipate any and all conditions and situations under which the information and our products or the combination of both with others will be used. We do not assume any liability in the safety and suitability of our products alone or in combination with others. Users must make their own tests to determine the safety and suitability of each product used alone or with other products for their own use. Except any previous written agreement, our products are sold without guarantee and customers must assume all liability for any loss or damage suffered by themselves or by third parties, either from handling or use of our products alone or with others. In case of any difference or variation seen during the use of the products we request that you contact our technical department.