

ELSOLD Lead-free Deoxidation Tablets

The ever increasing use of lead-free solder alloys and the higher process temperatures required by these alloys automatically lead to a faster oxidation rate and more dross formation. The addition of our developed lead-free Deoxidation Tablets helps to largely avoid the aforementioned negative effects. Furthermore they help to regenerate the Phosphor and Germanium level of SN100(Ag) MA-S baths, if - e.g. due to long heating times without production - the level has decreased too much.

Composition / Description

Sn99P1 in the form of tablets

Sn99Ge1 in form of tablets

Sn95Ge5 in pieces

Advantages

- much reduced oxidation tendency on the liquid solder
- distinct reduction of bridges and icicles
- improved hole fill due to optimized surface tension
- lower solder consumption

Application & Usage / Functional Test / Tarnishing Test

Upon request the phosphor content can already be correctly adjusted in lead-free ELSOLD soft solders when being shipped to the customer. During the soldering process the proper content of phosphorous can be maintained by adding our original deoxidised ELSOLD soft solders.

In case of solder baths with limited throughput and/or increased operating temperature the phosphorous content may be used up after a longer period of operation. This can be compensated by adding Deoxidation Tablets. The same applies for solder baths using original lead-free solders without phosphorous. In dip solder baths for general tinning work, add 1 – 2 tablets per kg of solder. In wave or drag soldering machines: 4 – 6 tablets per 10 kg of solder are need, to replace the used phosphorous. The exact number of required tablets depends also on the respective process parameters.

A solder bath adjusted to the correct phosphorous level must not show any discolouration / tarnishing of its surface within one minute at 350 °C after initial cleaning of the surface by scraping.

Application & Usage for SN100(Ag) MA-S baths

For regeneration of Phosphor and Germanium level of **SN100(Ag) MA-S** baths, TAMURA ELSOLD will calculate the right amount of Sn99P1, Sn99Ge1 or Sn95Ge5 based on bath analysis. Please only add exactly the calculated amount, as e.g. too much Phosphor can cause formation of Sn-P-phases.

Delivery Form

ELSOLD Deoxidation Tablets are packed in small bottles of 50 pcs or in plastic jars of 800 pcs.

Shelf Life

Minimum 5 years if stored in dry and clean environment.

Health and Safety

Please refer to the relevant material safety data sheet for health and safety advice.

Important information: The above information was put together based on the data available to the producer at the time of print. The technical data contained herein are consistent with the properties of the material but should not be used for the preparation of specification as it is intended for reference only.