Unisilver® Solder Tin

- by Unipak

Unisilver® Solder Tin (hard solder)

Unisilver is suitable for flux-free hard soldering of copper pipes connectors on installations for oil, gas (also liquid), as well as cold and hot water (up to 200 °C).

Unisilver 45 contains 45% silver. Unisil is used for soldering brass, redware and copper-tin alloys.

Soldering is a method of joining metal parts, where two or more items are joined with a molten material - Unitin or Unisilver.
The soldering process takes place by heating the parts to be joined to a temperature that is lower than their melting temperature, but higher than the melting temperature of the solder metal. Thereby, the solder metal melts and flows onto the solder pieces. During solidification, a metallic bond appears between the solder blanks, which creates the solder joint itself.
Soldering is divided into soft and hard soldering. Soft soldering with Unitin is carried out at temperatures below 450 °C, hard soldering with Unisilver at 450 °C - 850 °C.
A prerequisite for a correct solder joint to be created is that the molten solder metal is able to flow onto the solder pieces to be joined. If the surface is contaminated with grease, dirt or oxides, direct contact between the solder items and the solder metal is prevented. Univlies are used precisely to remove dirt and oxidation layers, so that a prerequisite is created for a correct solder joint.
The solder blanks are cleaned with Univlies as the cleaning pieces are rubbed/scrubbed hard against the area that will later be soldered. Univlies are used to prepare the soldering area for both hard and soft soldering.

Flux agent is applied to the cleaned solder areas - Uniplus for soft soldering and Unisel for hard soldering. The flux agent ensures that the oxidation layer on the metal is removed so that contact can occur directly between the solder pieces and the solder tin.
With both hard soldering and soft soldering, the solder items are fed/sucked into the transition between the solder items (typically touching end and solder sleeve) by means of capillary force. Therefore, the solder blanks to be assembled must be carefully matched to each other.
The cleaned and flux-lubricated solder pieces are now assembled and heated to such a high temperature that the solder easily and by itself flows into the joint between the solder pieces when the tin is brought into contact with the solder pieces where soldering is desired - typically in the gap between the pipe and the solder sleeve.
Unisilver has a melting point of 640 °C, so here the soldering area and the soldering items must be heated to at least this temperature for the brazing to work.

INSTUCTIONS FOR USE:

1. Clean all surfaces to be soldered using a Univlies Cleaning Pad.
2. Apply the flux agent from the supplied bottle.
3. Heat up the soldering point immediately after applying flux. The soldering point must be heated to the appropriate temperature for the material.
4. Add Unisilver Solder Tin into the solder gap.
5. Allow the soldering point to cool down and wipe off if necessary. Wipe of excess flux agent with a damp cloth.

   Remember to flush the system through before commissioning.

Packaging		Item no.	EAN no.	VVS no.	RSK no.	NRF no.	LVI no.
Unisilver 1 kg		4537545	5708923454546	043226620	2018054	9507921	7075273

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Additional product information, safety data sheets, demo videos, instructions for use, etc. can be found at: www.unipak.dk
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We cannot assume responsibility for the results obtained by others over whose methods we have no control.
It is the user's responsibility to determine suitability for the user's purpose of any application methods mentioned herein.

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