Product Information

Water soluble solder paste for an excellent wetting on all well-known surfaces.
Flux, DIN EN 29454, 2.1.3.C, DIN EN 61190-1-3, ORM0, IPC J-STD-004B, ORM0

Metal powder content 80 % - 90 %

Item-No. : 23..2303....

All information about our products is the result of our long standing experience which we would like to pass on to our customers as application support. However, as we do not have any influence on the application of the works carried out with our products, please see the warranty claims in our conditions of sale because our liability is limited.

This product information does not constitute warranted properties.

Description

The solder paste **ISO-Cream® "EWL 2303" - LEAD-FREE** is an odourless, homogenous, ready-made, water washable mixture of metal powder, binding agents, solvents, fluxes as well as thixotropic agents.

This paste has excellent wetting properties and is ideally suited for the soldering of difficult to solder areas. The solder paste **ISO-Cream® "EWL 2303" - LEAD-FREE** is insensitive to humidity and temperature. It shows no tendencies to formation of solder balling on chip-resistors and capacitors.

FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE has a very strong wet bonding force and is also suitable for assembly machines with very high accelerations/decelerations. The paste has a very long stencil time and can be used in printing machines with a temperature control unit (very strong ventilation). The rheology of this paste has been optimized to achieve excellent printing results on narrow openings as well as a good first print after long breaks. Laboratory tests have shown that the first print after a break of 3 hours was unobjectionable. **FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE** is characterized by its long adhesiveness. Printed PCBs can still be assembled for approx. 16 hours after printing (depending on room temperature and humidity).

Properties

Alloy	Melting point	Powder form	Metal powder content	Viscosity in mPas*
Sn95,5Ag4Cu0,5	217 - 218° C	ball-shaped	80 - 89 %	300.000 - 900.000 mPas
Sn96,5Ag3Cu0,5	217 - 220° C	ball-shaped	80 - 89 %	300.000 - 900.000 mPas
Sn96,5Ag3,5	221° C	ball-shaped	80 - 89 %	300.000 - 900.000 mPas
Sn99,3Cu0,7	227° C	ball-shaped	80 - 89 %	300.000 - 900.000 mPas
Sn97Cu3	230 - 250° C	ball-shaped	80 - 89 %	300.000 - 900.000 mPas

* Viscosity measured with Brookfield RVT, Shaft TF 5 U/min, 25° C

Grain sizes:
2 = Standard 45 - 75 µm
3 = Fine-Pitch 25 - 45 µm
4 = Superfine-Pitch 20 - 38 µm
5 = Superfine-Pitch 15 -25 µm

Flux: DIN EN 29454, 2.1.3.C, DIN EN 61190-1-3, ORM0, IPC J-STD-004B, ORM0

Recommended stencil strength:
Standard = 150 – 200 µm
Fine-Pitch = 100 – 150 µm
Superfine-Pitch = 80 – 125 µm

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Organic Carrier Materials

Their composition largely excludes an encrustation when stocked properly and assures the following rheological properties:

- excellent printability
- constant viscosity

Advantages

- low flux residues
- little content of volatiles ⇨longer cleaning intervals of the reflow oven
- water washable
- excellent printing quality
- unobjectionable soldering results with all common soldering profiles
- insensitive to environmental influences
- stability of the viscosity also on print breaks
- high stencil time of approx. 16 hours

Application Information

- Before opening the container, the paste should have reached room temperature, so that there will be no condensation on the paste.
- Stir **FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE** well before use.
- **FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE** keeps its adhesive consistency for a long period which allows trouble-free assembly of the circuit even after 16 hours. The exact period depends on the ambient conditions, size and form of the components as well as on the accelerations / decelerations on the line.
- The peak temperature depends on the thermal capacity of the components. On request we can provide you with our recommended solder profile.
- **FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE** can be soldered under air or inert gas.
- Used solder paste (e.g. rest on the stencil) should not be replaced into the jar because the durability of the unused paste will be reduced essentially. Used solder paste should be kept separately and if necessary should be mixed with fresh solder paste directly before use.

Washing

The flux residues on the soldered circuits can be removed with lukewarm distilled water.

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Storage

Store in tightly closed containers protected from humidity, sunlight and heat.
FELDER-ISO-Cream® "EWL 2303" - LEAD-FREE can be stocked at least 4 months (storage at constant temperature of 5 - 15° C).

Delivery Forms

Jars:	0,250 and 0,500 kg
Cartridges:	6 and 12 oz Semco®
Cassettes:	ProFlow™ and PuckPack™
Dispensing cartridges:	5, 10 and 30 cc

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