ISO-Flux® „ClearWave“ / „ClearWave S“

No-clean fluxes for wave soldering processes in the production of electronic assemblies

Description

ISO-Flux® „ClearWave“ and „ClearWave S“ are alcohol-based colophony and halogen-free no-clean fluxes for machine soldering of printed circuit boards with THT and SMD assembly. They have outstanding activation properties and excellent spreading on all common soldering surfaces. The low solids content ensures optically residue-free soldering. An extremely low acid value and minimal residues after soldering lead to extremely high surface resistance values in the SIR test. The flux can be applied to the PCB using all known fluxing methods (e.g. foaming, spraying, jetting, etc.).

ISO-Flux® „ClearWave“ and „ClearWave S“ have been specially developed for the high soldering temperatures in lead-free soldering technology, but show equally good soldering results in the leaded soldering process. They remain stable even at soldering temperatures of around 300 °C until the soldering process is complete.

ISO-Flux® „ClearWave“ and „ClearWave S“ were developed with the aim of optimally inerting metallic circuit board surfaces during an automated wave soldering process. With photopolymer solder resists, modern 2-component solder masks and unpainted PCBs, this flux prevents the formation of solder beads thanks to its special formulation.

ISO-Flux® „ClearWave“ is ideally suited for wave soldering systems with spray fluxers as well as for selective soldering systems, especially with dropjet fluxers, as the jet nozzles cannot stick together and the spray mist is not sticky (no sticky residues on transport frames and masks).

The resin-containing variant ISO-Flux® „ClearWave S“ has been optimized for wave soldering systems with foam fluxer application and also for selective soldering with a spray fluxer system. The minimal resin content ensures a very fine-pored foam crown and forms a physical resin encapsulation for flux residues that have not fully reacted.

Properties	ClearWave	ClearWave S
Solid content in %	2,0	2,2
Acid value	12,9	12,9
Density (20 °C) in g/cm³	0,791	0,794
Halide content in %	<0,01	<0,01
Resin content in %	0	0,2
Colour	wasserklar	wasserklar
Minimum shelf life	24 Monate	24 Monate
Thinner	VF-2	VF-2

Preheating and solder bath temperature

The typical preheating temperature, measured on the component side of the PCB, is between 100 and 130 °C. When using solder containing lead, the measured temperature should be 80-110 °C.

For the lead-free soldering process, we recommend a maximum solder bath temperature of 300 °C.
The ideal solder bath temperature in the lead-containing wave soldering process is ≤250 °C.

Soldering speed

A speed above the solder wave of 0.8 - 1.6 m/min is recommended.

Minimum shelf life and storage

At least 24 months from production if stored properly.
Recommended storage temperature: +5 °C to +25 °C.

Safety instructions

Please refer to the corresponding safety data sheet.

Delivery form

Packaging size	Packaging form
1,000 l	Bottle
10,000 l	Canister

Other packaging sizes available on request