

LIQUID FLUX HW240

Halide-free and VOC-reduced No-Clean flux

DESCRIPTION

Halide-free and VOC-reduced No-Clean flux classified as type 2.2.3.A according to DIN-EN 29454-1 (DIN 8511, F-SW23), Type ORLO according to EN 61190-1-1 and J-STD-004. The Stannol HW240 contains a solvent mixture of alcohol and pure, deionised water, a contribution to current environmental developments. The European VOC-standards being currently valid demand a reduction of the emission of organic substances into the environment. A VOC-reduced flux can be used, if a VOC-free flux is unsuitable due to the application conditions.

The changeover to the VOC-reduced Stannol HW240 can be an option if changing to lead-free manufacturing. The required higher temperature in the preheat area and the higher temperature of the solder wave facilitate the application of a completely or partially water based liquid flux as an appropriate alternative for reducing environmental impact. The Stannol HW240 fulfils all requirements for a modern No-Clean flux in wave and selective soldering processes.

CHARACTERISTICS

Stannol liquid flux HW240 offers the following advantages:

- Halide and Rosin-free
- Reduces VOC emissions by ~50%
- Good wetting and through hole-filling
- For lead-free and lead-containing soldering
- No visible residues, no corrosion
- High surface insulation resistance
- Pin testable
- Application with spray and foam fluxers

APPLICATION

The Stannol HW240 has been developed for applications with foam and spray fluxers. The preheat temperature, measured on the top side of the printed circuit board should be set to 100-120° C. The increased preheat temperature is required due to the higher evaporation energy of the water. In addition the activation of the flux is optimised within this temperature range and a proper preheating of the components can be guaranteed. Higher temperatures might be required, depending on the thermal demands of the printed circuit board.

APPLICATION RECOMMENDATIONS

RECOMMENDATIONS	LIQUID FLUX HW240
Pre-Heating:	100 – 120°C top side PCB
Flux amount:	15 – 25 ml/min, depending on the used spray head set up
Belt speed on wave solder equipment:	0.8 – 1.2 m/min
Solder bath temperature:	250 – 275°C

PHYSICAL PROPERTIES AND DATA

GENERAL PROPERTIES	LIQUID FLUX HW240			
Colour:	colourless			
Density at 20°C:	0.933 g/cm ³			
Solid content:	2.4%			
Acid rating:	18.7 mg KOH/g			
Halide content:	none			
Ignition temperature:	none			
Thinner:	generally not required with spray flux systems			
Optimum storage conditions:	10°C to max 30°C			
SIR values:	96h	1.0 *10 ¹² Ω 9.2*10 ¹² Ω	168h	4.7*10 ¹² Ω 4,5*10 ¹² Ω
Copper mirror test:	Pass, L			
Silver chromate paper test:	Pass			

SHELF LIFE

The shelf life of this flux is 2 years after date of delivery (provided proper storage in originally sealed container).

HEALTH AND SAFETY

Before using please read the material safety data sheet carefully and observe the safety precautions described.

NOTICE

The above values are typical and represent no form of specification. The Data Sheet serves for information purposes. Any verbal or written advise is not binding for the company, whether such information originates from the company offices or from a sales representative. This is also in respect of any protection rights of third parties, and does not release the customer from the responsibility of verifying the products of the company for suitability of use for the intended process or purpose. Should any liability on the part of the company arise, the company will only indemnify for loss or damage to the same extent as for defects in quality.