Soldering Flux SelectIF 2040

VOC-free, no-clean soldering flux for selective soldering

RoHS compliant 2002/95/EC

Description:

SelectIF 2040 is a VOC-free and no-clean soldering flux developed for selective soldering.

The flux combines a wide process window in selective soldering with low residue formation.

SelectIF 2040 is suitable for soldering units with high thermal mass and hence high temperatures and long process times.

Due to its special composition, it leaves less residues after soldering than the conventional fluxes for selective soldering.

SelectIF 2040 tends to give low solder balling after soldering.

The flux is compatible with lead-free and SnPb alloys

Additionally, the flux is absolutely halogen free, guaranteeing a high reliability after soldering.

Physical and chemical properties:

Density at 20°C	:	1,00 g/ml ± 0,01
Colour	:	clear
Odour	:	sweet
Solid content (activity)	:	6,5 % ± 0,2
Halide content	:	0,00 %
Flash point (T.C.C)	:	n.a.
Total Acid Number	:	44 mg KOH/g ± 2
IPC/ EN	:	OR/ L0

More information:

Key advantages:

- Wide process window
- Suitable for high temperatures and long process times
- Low residue
- Low tendency towards solder balling
- Compatible with SnPb and lead-free alloys
- Absolutely halogen free

Applying the flux

In selective soldering, the flux is usually being applied by a micro-jet nozzle. The correct amount of flux will depend on parameters like type of surface finishing, oxidation level, thermal mass of the board and component,...and soldering parameters like used alloy, soldering temperature and time, turbulence of the wave,...

It should be the goal to apply as little as possible flux with good soldering results. In practice this optimal flux volume is being determined by trial and error or by copying values of similar boards/ solder joints.

Preheating and wave contact

In general a preheating is used to limit the temperature shock and to evaporate the solvent of the flux.

It is advisable to have the water content evaporated before wave contact.

A good preheating can promote through hole wetting.

In selective soldering the wave contact is mostly determined by good through hole wetting. This is influenced by the preheating, the thermal mass of PCB and component, the wettability of the finishes, the solidification point of the used alloy and the working temperature.

Like the flux amount, in practice this is being determined by trial and error or by copying values of similar boards/solder joints.

Typical contact times are between 1s and 2s.

Test results

conform EN 61190-1-1(2002) and IPC J-STD-004A

Property	Result	Method
Chemical		
Flux designator	**OR L0**	J-STD-004A
Qualitative copper mirror	**pass**	J-STD-004A IPC-TM-650 2.3.32
Qualitative halide		
Silver chromate (Cl, Br)	**pass**	J-STD-004A IPC-TM-650 2.3.33
Quantitative halide	**0,00%**	J-STD-004A IPC-TM-650 2.3.35
Environmental		
SIR test	**pass**	J-STD-004A IPC-TM-650 2.6.3.3
Qualitative corrosion, flux	**pass**	J-STD-004A IPC-TM-650 2.6.15

Safety

SelectIF 2040 is non hazardous. Please consult the safety datasheet for more information.

Packaging:

SelectIF 2040 is available in the following packages:

1L bottles

10L polyethylene drums
25L polyethylene drums

Trade name : SelectIF 2040 VOC-Free, No-Clean Selective Soldering Flux

D i s c l a i m e r

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Product information in other European languages can be obtained at Interflux® Electronics NV, 9042 Gent.

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