



Soldering flux IF 6000

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ELECTRONICS N.V.



Technical data IF 6000
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Page 1

No-clean soldering flux for selective fluxing applications

Description:

IF 6000 is a no-clean soldering flux developed for selective fluxing applications.

IF 6000 is suitable for SnPb and lead-free alloys.

Typical processes where **IF 6000** can be used are hand soldering, touch up, automated soldering, BGA Rework, stamp soldering, "wafer bumping",...

The flux has not been developed for selective wave applications.

IF 6000 is absolutely halogen free, guaranteeing a high reliability after soldering.

The flux contains natural rosin, providing a wide working window. Depending on the amount of flux and the temperature profile, the flux may leave a slight residue after soldering.

Applying the flux

Due to its wide range of use, there are many possible ways of applying the flux. The flux can be applied by brush, by spraying, dipping, and spin coating

The flux should be applied on the surfaces that need to be soldered. In general it should be the goal to apply just enough flux in order to minimize residue formation after the



Physical and chemical properties:

Density at 20°C	: 0,870 g/ml ± 0.01
Colour	: Amber
Odour	: Aliphatic Alcohol
Solid content	: 35%
Halide content	: 0,00%
Flash point (T.O.C)	: 13°C (55°F)
Total Acid Number	: 59,5 mg KOH/g ± 2
IPC/ EN	: RO L0

soldering process. This is being done by trial and error because each case has different parameters, influencing the required minimum flux amount. Minimize the flux amount gradually until soldering defects like non wetting, orange skin, etc... Appear. Raise the amount again till the problems disappear.



More information:

<i>Applying the flux</i>	1
<i>Pre heating and pro-file</i>	2
<i>Test results</i>	2
<i>Safety</i>	2
<i>Packaging</i>	3

Key advantages:

- Wide range of use
- Wide process window
- Suitable for both SnPB and lead-free alloys
- Absolutely halogen free



Preheating and Profile

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

IF 6000 doesn't require a preheating. If possible, it is advisable to have the alcohol evaporated before going to soldering temperatures.

A reflow profile is usually determined by the alloy and the limitations of the used materials that are submitted to the reflow profile.

Due to its wide process window, **IF 6000** doesn't have many limitations towards reflow profiles. However for rework of

BGAs, the gel flux **IF 8300** is mostly used.

The use of nitrogen in the reflow process is not necessary but always advisable. Reducing atmospheres like nitrogen/hydrogen are possible.

In hand soldering and automated soldering it is always advisable to

keep the temperature below 400°C. Higher temperatures are possible but can reduce tip life.

The use of Interflux® **TIP TINNER** can prolong soldering tip life.

Test results

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

Property	Result	Method
Chemical		
Flux designator	RO LO	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

IF 6000 is a highly flammable and irritant product and should be treated accordingly. Please consult the material safety datasheet for more information.



Packaging:

IF 6000 is available in the following packages:

Refillable flux pen

Non refillable flux pen

0,5L bottles

1L bottles

10 litres polyethylene drums

25 litres polyethylene drums

Trade name : IF 6000 No-Clean Soldering Flux for Selective Fluxing Applications

D i s c l i m e r

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