



Low VOC soldering flux IF 3006

INTERFLUX®
ELECTRONICS N.V.



Technical data IF 3006

Ver: 1, 16-Jul-07

Page 1

Low VOC, No-clean soldering flux

Description:

IF 3006 is a no-clean, halide free soldering flux with a low VOC content. It can be used in lead free and lead bearing applications.

Advantages of a low VOC flux

Because of the lower vapor pressure no adjustment of the flux is needed, even in foam applications. The emissions of VOC's may be reduced to 60% of the values of alcohol based fluxes, while maintaining solvent power for excellent through hole wetting. Good solder ability even on the most difficult to wet finishes.

IF 3006 produces high first pass yield in ICT because of its bodiless technology.

Why Low VOC?

- ▶ High Quality: high first pass ICT yield—bodiless technology
- ▶ Low Volatile Organic Compounds emission caused by flux evaporation
- ▶ Lowered consumption compared to alcohol based fluxes
- ▶ No more use of flux thinner



Physical and chemical properties:

Density at 20°C	: 0.872 g/ml ± 0.01
Colour	: Clear, colourless
Odour	: alcohol
Solid content	: 3.2% ± 0.2
Halide content	: none
Flash point (T.O.C)	: 41°C
Total Acid Number	: >24 mg KOH/g ± 2
IPC/ EN	: OR/ L0

- ▶ No checking of flux quality needed
- ▶ Improvement in solder ability and cleanliness
- ▶ A reduction of circa 30% in flux consumption

More information:

<i>Avoiding solder balls</i>	2
<i>Pre heating</i>	2
<i>Wave contact</i>	2
<i>Packaging</i>	3

Key advantages:

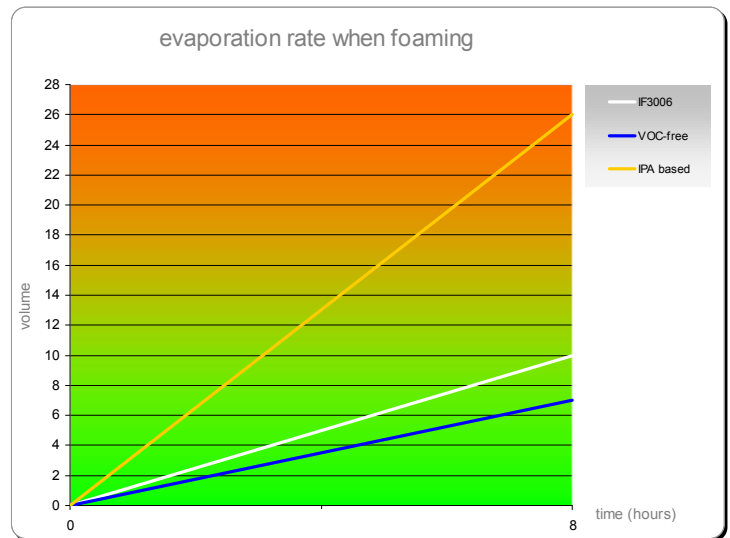
- Absolute halide free
- Low VOC
- Resists high temperatures
- Wide process window
- Improved through hole filling



Evaporation stability

The evaporation will increase during the foaming operation. The graph on the right shows the different flux types and their evaporated volume during a continuous foaming operation without passing boards. The graph shows that for most flux types the evaporation during foaming is similar compared to static

evaporation except for the evaporated volume, which is much higher in the same time frame.



Preheating

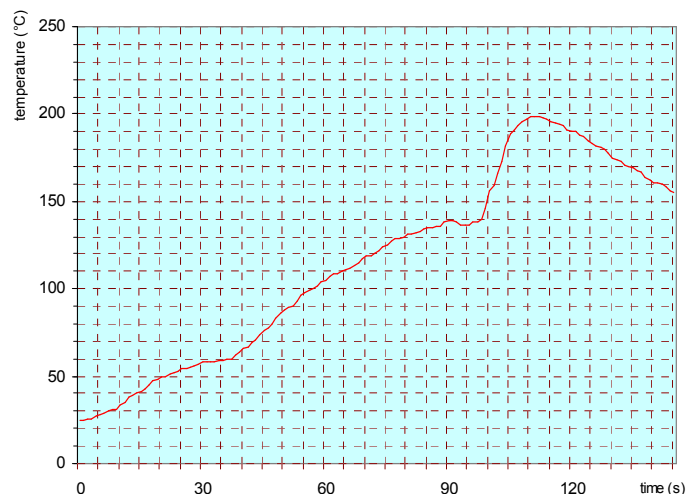
All water should be evaporated from the boards before hitting the wave.

Avoid hot air preheating settings above 150°C

“All water should be evaporated before hitting the wave”

The recommended preheat temperature measured on the top-side of the boards is 80°C-160°C.

Preheat slope:
typical: 1,5°C/s
min: 1,0°C/s
max: 2,5°C/s



Wave contact

Typical wave contact or dwell time value is 4,5s when using a single solder wave. For double wave soldering systems the values will be, 2s for the first wave and 3,5s for the second wave. Lower total dwell time limit is 2s. Solder wetting can

be optimal at this value however longer contact times are recommended to provide total flux wash off from the boards. The maximum upper limit will be determined by the level of shorts.



Packaging:

IF 3006 is available in the following packages:

- 10 litres polyethylene drums
- 25 litres polyethylene drums
- 200 litres polyethylene drums

D i s c l a i m e r

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability or the accuracy of this information or the suitability of our products in any given situation. Users of our products should make their own test to determine the suitability of each such product for their particular purposes. The product discussed is sold without such warranty, either express or implied.

Copyright:

INTERFLUX[®] ELECTRONICS

For the latest version of this document please consult:

www.interflux.com