



FOAMABLE, VOC-FREE, NO-RESIDUE FLUX TYPE PACIFIC 2010 F

Description:

Interflux[®] Electronics developed this VOC-free flux especially for the electronic industry wanting to meet the demands of ISO 14000 and currently working with a foam application in their soldering machine.

Interflux[®] Electronics always uses an organic chemistry, which has the ability to evaporate totally when enough energy is transferred to those chemicals, resulting in an extremely clean to No-Residue PCB (printed circuit board).

Why VOC-free?

No more fire risk;
No more Volatile Organic Chemicals emission;
No more irritating alcohol smell in your production;
No more use of thinner;
No or very reduced checking of flux quality;
Improvement in solderability and cleanliness;
Lower transport, storage and insurance costs;
A reduction of circa 30% in flux consumption.

Physical and chemical properties:

Density at 20°C:	1.00 g/ml $\pm$ 0.01
Colour:	colourless
Odour:	no smell
Solids content % w/w:	2.5% $\pm$ 0.15
Halide Content:	0%
Flash point (T.O.C.):	none
Total Acid Number:	16 mg KOH/g $\pm$ 2
Shelf life:	1 year in closed conditions

Packaging:

10 litres polyethylene drums.
200 litres polyethylene drums.



How to use PACIFIC 2010 F in your process ?

1. Be sure that your flux tank and your foam stone are not polluted with your present flux.
2. Fill your flux tank to its maximum level.
3. Adjust your air supply till you get a fine bubble layer of foam on the topside of the foam nozzle, preventing too slow an overflow.
4. To check if the speed of overflow is sufficient, you blow into the foam, the foam will break down due to the heat of your breath, and what is important is that the foam building recuperates very quickly. This simulates a hot carrier that enters into your foam. When the foam does not recuperate immediately the first part of your PCB will not be fluxed, creating all sorts of defects.
5. In case the flux has been stored at temperature lower than room temperature: be aware that the foam formation can change during the heating up period till the flux reaches the room temperature.
6. Always use an air knife in VOC free applications! (available at Interflux)
Reasons:
 - to take away the excess of flux, resulting in less need of heat and results in reduction of the consumption;
 - to secure there is enough flux into the holes (VOC- free fluxes have a less capillary action than alcohol-based fluxes).
7. Adjust your preheating (in general upwards) so that the topside of your PCB reaches circa 120°C just before entering your first solder wave. The PCB should be as dry as possible before hitting the first wave.
8. In case you would see solder balls coming on the topside of your PCB, your preheating is too low or/and your transport speed is too high.
9. Keep the wave contact with the first wave lower than 2 seconds.
10. Keep the wave contact with the second wave between 2 and 5 seconds.
11. In case you have to solder Ni/Au PCB's, keep a total wave contact of > 6 seconds
12. Adjust your wave so that the height of the wave is minimum 2 mm higher than the longest component lead and/or SMD component positioned on the solder side of the PCB.
13. Do not solder in a wave where solid metal flakes are floating. First clean up the dirt under the nozzles and then start soldering in a clean, only liquid wave.



14. When you work with a low-solids, no-clean flux, you must always drain the oxides that are lying on the topside of your solder wave, in the same direction as the PCB is transported.
15. The draining speed of the oxides should have the same speed as the transport speed of your PCB.
How to check this? When the PCB is entering into the wave the top layer of oxides should start to move. When you stop the PCB in the middle of the wave the top layer of oxides should stop floating to the backside of your solder wave. When this happens, the draining of the oxides has the same speed as the transport speed of the PCB.
16. When you create this wave balance you will create a zero speed zone where your components will leave the solder wave, resulting in a serious reduction of the shorts.
17. The PCB should enter into the solder with a minimum of 30% of its thickness. By doing this, you will always create a good draining of the oxides on top of the solder wave, you will create an upgoing force of the solder, which will improve the wettability in the PTH-holes of the PCB and the PCB will always come in contact with fresh, low oxidised solder, which makes it possible to work with lower activated fluxes, without making a compromise in soldering results.
18. In Nitrogen machines you may work without the draining setting, due to the lack of oxides in the wave.
19. The angle of your transport system should be set as close as possible to 7°.
20. It is advised to use as much wave contact as possible, and to leave the wave at 70% of its wavelength.
21. Always try to prevent the bending of your PCB, there the bending will create variable contact time and wave pressures with your PCB.
22. Use the speed setting which will give you the right preheating and wave contacts.

Interflux® Electronics wishes you a successful start-up with our VOC-free flux type PACIFIC 2010F.

In case of questions, please contact our technical team!
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