



# VOC free soldering flux PacIFic **2010F**

INTERFLUX®  
ELECTRONICS N.V.



Technical data PacIFic 2010F

Ver: 3.11 24-09-15

Page 1

## VOC free, no-clean and halide free soldering flux for foam and spray applications

### Description:

The Interflux® PacIFic **2010F** is an environmentally friendly water based flux, without any volatile organic compounds (VOC free).

The flux can be applied by means of foam, spray or dip fluxing.

PacIFic **2010F** is absolutely halogen free, making it a very safe flux with high reliability properties.

The flux does not contain rosins nor resins. This will result in very low ICT contact problem faults.

PacIFic **2010F** can be used for both SnPb and lead-free soldering applications.



*Products pictured may differ from the product delivered*

### Physical and chemical properties:

Density at 20°C	: 1.00 g/ml ± 0.01
Colour	: clear
Odour	: sweet
Solid content	: 2,5% ± 0.15
Halide content	: 0,00%
Flash point (T.O.C)	: none
Total Acid Number	: 16 mg KOH/g ± 2
IPC/ EN	: OR/ L0

### Why VOC-free?

- ▶ No risk of fire caused by flux inflammation
- ▶ No Volatile Organic Compounds emission caused by flux evaporation
- ▶ No irritating alcohol smell in your production caused by flux evaporation
- ▶ No use of flux thinner
- ▶ No checking of flux solid content needed
- ▶ Improvement in solder ability and cleanliness
- ▶ Lower flux transport, storage and insurance costs
- ▶ A reduction of circa 30% in flux consumption



### More information:

<i>Applying the flux</i>	2
<i>Preheating</i>	2
<i>Wave contact</i>	3
<i>Packaging</i>	3

### Key advantages:

- Suitable for foam fluxing
- Absolutely halide free
- 100% water based
- Practically odourless
- Clean boards after soldering
- No ICT contact problems



## Applying the flux by spray

The PacIFic 2010F can be applied by means of a spray fluxing unit. It is advised to use a double spray stroke during fluxing, whenever possible and to keep the flux pressure low. The nozzle traverse speed is set to a value which ensures that every point on the board is sprayed twice, once from each side. When this condition is met the result

is a 50% overlap on the spray pattern. This will give the most uniform spray pattern coverage. Spray pattern coverage can be checked by passing a piece of cardboard through the spray fluxer. Remove it before it reaches the preheating and observe the uniformity of the spray pattern. Additionally the spray fluxer settings need to

be checked by passing a glass plate or empty circuit board through the fluxer. Remove it before it reaches the preheating and check it on flux quantity. There may be no drops present. Drops are a sign of excessive flux and are difficult to evaporate. Reduce the flux amount until defects typical for a too low flux amount like, webbing, flagging,

shorts and icicles are observed. From this point increase the flux level again until defects disappear.



*“a 50% overlap will give the most uniform spray pattern...”*

## Applying the flux by foam

The PacIFic 2010F can be applied by foam. Start with a clean foam stone in a clean fluxer unit. The flux level should be about 5 cm over the top of

the foam stone. Increase the air pressure until you get a fine linear bubble formation on the top of the foam nozzle. Always use an airknife

to eliminate drop formation between SMD components.

After intensive use there can be a formation of some thick foam on the top of the

flux that does not disappear. This is an indication to change the flux.

## Preheating

The recommended preheat temperature measured on the top-side of the boards is 80-160°C. This value is retrieved from field

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

Avoid hot air convection preheating settings

above 150°C.

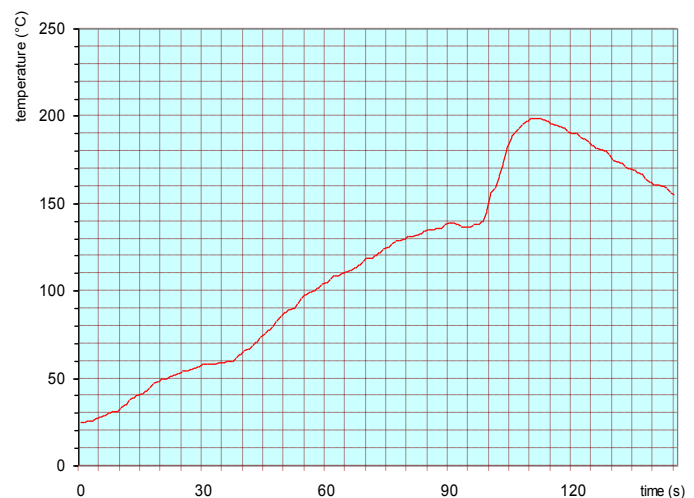
Preheat slope: typical :1-3°C/s

*“All water should be evaporated before hitting the wave”*

## Wave contact

Typical wave contact or dwell time value is 3-4s when using a single solder wave. For double wave soldering systems the values will be 1-2s for the first wave and 2-4s for the second wave. Lower total dwell time limit is 2s. Solder wetting can be optimal at lower

values. 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 and the physical limitations of the board and components.



T° measured on the top side of a PCB in a lead-free wave soldering machine



## Test results

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

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

## Packaging:

PacIFic 2010F is available in the following packages:

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

Trade name : PacIFic 2010F VOC-Free No-Clean Soldering Flux

D i s c i m e n t

Because Interflux® Electronics N.V. 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

Please consult the latest version of this document on:

[www.interflux.com](http://www.interflux.com)

This document in another language?:

[www.interflux.com](http://www.interflux.com)