VOC free soldering flux PacIFic **2009M**

INTERFLUX® ELECTRONICS N.V.

Technical data 2009M

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VOC free, No-clean and halide free soldering flux for spray applications

Description:

The Interflux® PacIFic **2009M** is an environmental friendly flux especially developed without the use of any volatile organic compounds.

The flux does not contain any halides, neither rosins nor resins. The absence of rosin and resin will give very low ICT contact problem faults.

PacIFic **2009M** has very good wetting capacity and excellent soldering on all popular board finishes and is suitable for soldering with normal 63/37, lead-free alloys and for components and PCB-finishes with critical solder ability.

PacIFic **2009M** is absolutely halogen free. The flux allows a change-over from alcohol based fluxes to water based fluxes with absolutely no disadvantages.

Physical and chemical properties:

Density at 20°C	:	1.00 g/ml ± 0.01
Colour	:	clear
Odour	:	sweet
Solid content	:	3.7% ± 0.15
Halide content	:	0,00%
Flash point (T.O.C)	:	n.a.
Total Acid Number	:	25 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 quality needed
- ► Improvement in solder ability and cleanliness
- ► Lower flux transport, storage and insurance costs

More information:

Key advantages:

- Absolute halide free
- 100% water based
- Resists high temperatures
- Practically odourless
- Improved through hole filling

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Applying the flux

The PacIFic 2009M is designed to 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 boards are sprayed twice from two different sides.

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 pre heat unit. Additionally the spray fluxer settings need to be checked by passing a glass plate or empty circuit board through the fluxer. Remove it from the machine before it reaches the pre heater unit and is checked 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..."

Preheating

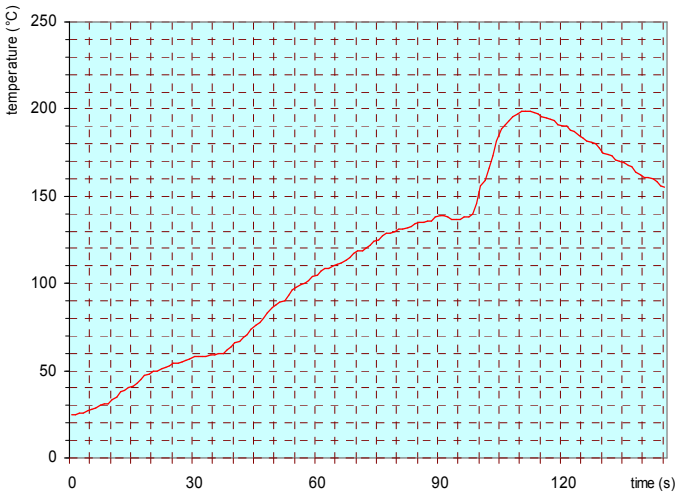
The recommended preheat temperature measured on the topside of the boards is 85°C-160°C.

Providing that all water should be evaporated from the boards before hitting the wave.

Avoid hot air convection preheater settings above 150°C

Preheat slope:
typical: 1,5°C/s
min: 1,0°C/s
max: 2,5°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 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 and physical limitations of the board and components.

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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

Packaging:

PacIFic 2009M 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.

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