



Soldering Flux OSPI 3311M

INTERFLUX®
ELECTRONICS N.V.



Technical data OSPI 3311M

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No-clean soldering flux

Description:

Interflux® **OSPI 3311M** is a no-clean flux that especially has been developed for high volume soldering of **OSP-boards** that have passed one or more reflow processes.

OSPI 3311M is an optimised version of OSPI 3311 for residue formation and odour.

Most OSP-finishings will degrade quickly after reflow, making (through hole) wetting in wave or selective soldering a challenge, especially with lead-free alloys.

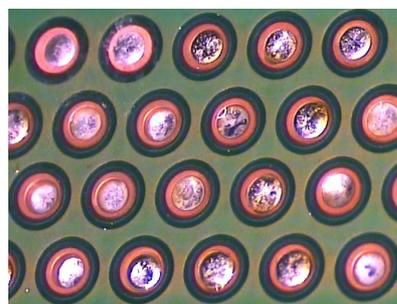
The elements of **OSPI 3311M** have been carefully chosen to promote (through hole) **wetting** on these degraded OSPs, especially with **high conveyor speeds and low preheat temperatures**.

Moreover, the flux is absolutely halogen free and has been designed to be safe and reliable.

Through hole wetting



Standard Flux



OSPI 3311M

OSP boards soldered with 1,6m/min on a SnCu solder bath after 2x reflow and 24hrs.

OSPI 3311M meets IPC requirements.



Products pictured may differ from the product delivered

Physical and chemical properties

Appearance	Clear colourless liquid
Solid content	5.3% +/- 0.5%
Halide content	0.00%
Density at 20°C	0.825 g/ml ±0.01
Acid number	42 mg KOH/g ±5
Odour	Alcohol
IPC/EN	OR/L0



RoHS
compliant

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Key advantages:

- Very good wetting on degraded OSP
- For high volume productions
- High conveyor speeds possible
- Absolutely halogen free
- For SnPb and lead-free alloys
- Reduced residue formation
- Reduced odour



Flux application

There are different ways of applying flux : spray, foam, immersion,...

When spray fluxing, it is important to get an even distribution of flux on the solder side of the PCB. Spraying in both directions is advisable and the speed of the fluxer head must be adjusted to the speed of the conveyor.

Spraying each point twice is advisable. A card board, glass plate or scrap board can be used to check this even distribution. A good penetration of the flux in the through holes is also very important. The flux should be sprayed to the top of the hole. The right air pressure and flux amount are important. This can be checked

with a fax paper on top of the board without components.

To reduce residue formation after soldering, it is important to find the minimum flux amount. It is found by reducing the amount that gives good soldering results until problems appear like poor through hole wetting, bridging,... and raising it again.

Preheating and wave contact

A preheating is used to limit the temperature shock of the PCB when entering the wave and to evaporate the solvent of the flux.

The flux has been designed to perform well on low preheating settings: 80°C-100°C (176°-212°F) top side is advisable. Higher preheating is possible for electronic units with high thermal mass. More

preheating can promote through hole wetting on these units. The flux itself has no lower limit for the preheating.

The wave contact is determined by the immersion depth, the conveyor angle and speed. More wave contact can promote through hole wetting. Take care not to overheat the board or

components, or flood the board (immersion too deep). In general, wave contact is between 1-2 sec for the first wave and 2-4 seconds for the main wave.

Test results

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

Property	Result	Method
Chemical		
flux designator	OR 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 2.3.33D
spot test (F)	pass	J-STD-004A IPC-TM-650 2.3.35.1A
quantitative halide	0,00%	J-STD-004A IPC-TM-650 2.3.35C
Environmental		
SIR test	pass	J-STD-004A IPC-TM-650 2.6.3.3B



Packaging

High density Polyethylene drums of:
10L, 25L and 200L

Trade name : OSPI 3311M No-Clean Soldering Flux

D i s c l a i m e r

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