



Solder paste IF 9009^{LT}

INTERFLUX®
ELECTRONICS N.V.



Technical data IF 9009^{LT}

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Activated, lead-free no-clean solder paste

Description:

IF 9009^{LT} is an activated no-clean solder paste that shows good wetting on strongly oxidized surface finishes and surfaces with poor wettability.

IF 9009^{LT} has good tackiness and print definition. It keeps its rheology characteristics during printing, resulting in a stable printing process.

The solder paste does not contain any rosin resulting in less harmful fumes and less oven maintenance. The residues after reflow are clear, they are easy to be penetrated by flying probe- and ICT-test pins. The residues can be cleaned off

IF 9009^{LT} is hydrophobic and gives no solder balling after reflow.

IF 9009^{LT} is low in halogens and is classified as RE/L1 according to IPC J-STD-004A.



Products pictured may differ from the product delivered

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Key advantages:

- Excellent wetting on surfaces with poor wettability
- Excellent wetting on strongly oxidized board finishes
- Clear residues after reflow

Availability

alloy	metal content	powder size	packaging
Sn96,5Ag3Cu0,5	printing: 88%	Standard type 3 (25– 45µ)	jars :250g/500g cartridges:
Sn95,5Ag3,8Cu0,7			
Sn95,5Ag4Cu0,5	dispensing: 84%	Type 4 and type 5 available for certain alloys	6Oz: 500g/600g/700g 12Oz: 1kg/1,2kg/1,3kg/1,5kg syringes : 5CC/10CC/ 30CC other packaging upon request
Sn99Ag0,3Cu0,7			
Sn98,5Ag0,8Cu0,7			
Sn95,8Ag4,2			
Sn99,3Cu0,7			
Other alloys upon request			



Reflow profile general

General

In general a profile with limited soak is advised. Also ramp profiles and soak profiles are possible. Soak profiles may be used when temperature differences across a board, due to a high mix of components or

large board sizes, need to be levelled out or when voids, if present, need to be decreased. When soldering an assembly in a lead-free reflow soldering process, care must be taken not to overheat components especially

when using air convection or IR ovens. It is very important to know the temperature limitations of the components used on the board. To get a good thermal mapping of the board it is advised to use thermocouples and a thermal meas-

uring tool. Measure on small outline, big outline and temperature sensitive components. Measure on the board side near the conveyor chain, in the middle of the board and close to, or on heat sinks.

Profile recommendations

Preheat

From room temperature until about 200°C at a rate of 1-3°C/seconds. Higher heating rates could result in component cracking due to absorbed moisture.

Soak

From 180°C to about 215°C at a rate of 0-1°C/seconds. In some cases a temperature holding soak zone is used to level out differences on a board. It is often used on high mix boards or to reduce voids in certain lead-free processes. A 20-90 sec

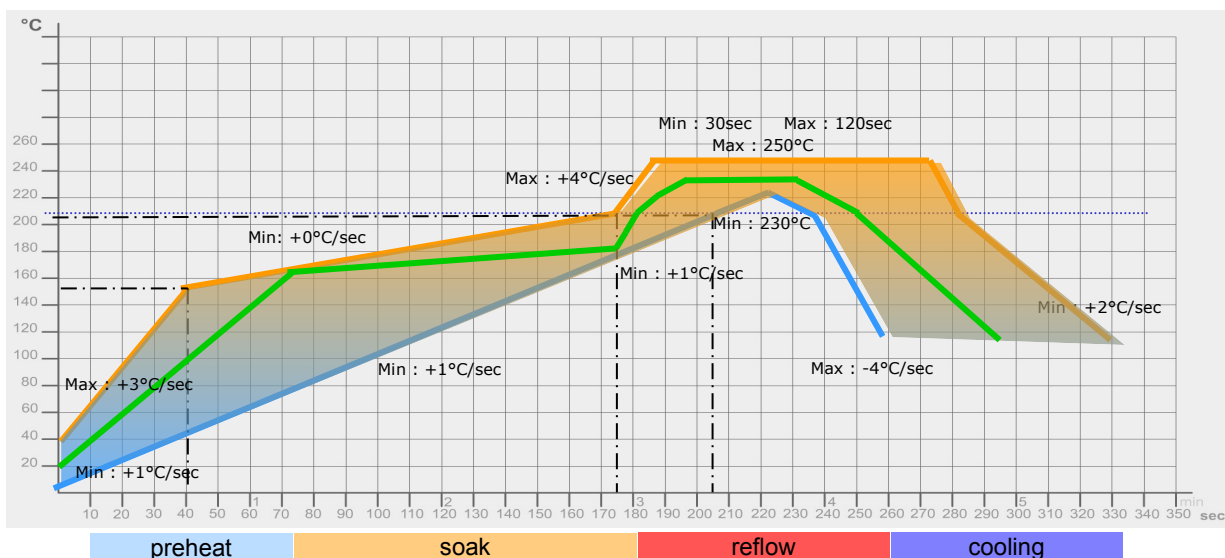
soak between 200°C and 215°C is often used for this purpose.

liquidus (over melting point of the alloy used) could be between 45 seconds and 90 seconds.

Reflow

Peak temperature used is related to component specifications. In general between 235°C and 250°C. The time in

Cooling
Cooling rate around -4°C/second because of differences in thermal expansion of different materials





Handling

Storage

Store the solder paste in the original packaging, tightly sealed at a preferred temperature of 3° to 7°C

Handling

Let the solder paste reach room temperature prior to opening the packaging. Stir well before use.

Printing

Assure good sealing between PCB and stencil. Apply no more than enough squeegee pressure to get a clean stencil. Apply enough solder paste to the stencil to allow smooth rolling during printing. Regular replenish fresh solder paste.

Maintenance

Set an under stencil clean interval which provides continuous printing quality. **IS-C8020** is recommended as cleaning agent in pre saturated wipes and USC liquid.

Reuse

Avoid mixing used and fresh paste. Do not put packages back into refrigeration when already opened. Store used paste in a closed separate jar at room temperature. A test board before re-using in production is advisable

Safety

Please always consult the safety datasheet.

Test results

conform EN 61190-1-2(2002) and IPC J-STD-004A/J-STD-005

Property	Result	Method
Chemical		
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
Environmental		
SIR test	pass	J-STD-004A IPC-TM-650 2.6.3.3

Property	Result	Method
Mechanical		
solder ball test after 15min	preferred	J-STD-005 IPC-TM-650 2.4.43
after 4h	acceptable	J-STD-005 IPC-TM-650 2.4.43
wetting test	pass	J-STD-005 IPC-TM-650 2.4.45
slump test after 15min at 25°C	pass	J-STD-005 IPC-TM-650 2.4.35
after 10min at 150°C	pass	J-STD-005 IPC-TM-650 2.4.35
spread test	137,89 mm ²	J-STD-004 IPC-TM-650, 2.4.46



Operating parameter recommendations

Printing
speed: 20—70mm/sec
squeegee pressure: ±250g / cm length
U.S.C. interval: every 10 boards
temperature range: 15°C to 25°C

Mounting
tack time: > 4 hours

Reflow
reflow profile: linear and soak
heating type: convection, vapour
phase, etc

I.C.T
flying probe testable
pin-bed testable

Cleaning

Cleaning of the paste from stencils and tools is recommended with Interflux® **ISC 8020**.

The residues after reflow of IF9009^{LT} are very reliable and don't need to be cleaned, however they can be cleaned if desired.

A compatibility list between Interflux® products and Zestron® cleaning products is available at Interflux.

Trade name : IF 9009It No-Clean, Lead Free Solder Paste

D i s c l i m e r

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