



## No-clean, halide free and colophony free gel flux

### Description

Interflux<sup>®</sup> **IF 8300** is a no-clean, halide free and colophony free gel flux with minimal residues after soldering.

The gel flux is available in different viscosities for different applications.

It can be applied by printing, dispensing, dipping or by brush.

**IF 8300** is typically used for rework and repair applications. Other fields of use can be reflow, hand and robot soldering applications where a wide process window in combination with low residue formation after soldering are required.

The gel flux is compatible with both lead-free and SnPb alloys and enables good wetting on virtually all surface finishes.

The residues are minimal and transparent and do not require cleaning.

**IF 8300** is absolutely halide free providing optimal reliability after soldering.



*Products pictured may differ from the product delivered*



### Key properties

- Absolutely halogen free
- Colophony free
- Wide process window
- Enables good wetting NiAu, OSP, I-Sn, AgPd,...
- Minimal residue

### Physical and chemical properties

|                     | IF 8300        | IF 8300-4    | IF 8300-6    |
|---------------------|----------------|--------------|--------------|
| Consistency         | viscous, tacky |              |              |
| Colour              | yellow         |              |              |
| Odour               | sweet, mild    |              |              |
| Halide content      | none           |              |              |
| pH (5% aq.sol)      | 3              |              |              |
| IPC/ EN             | RE L0          |              |              |
| Solubility in water | insoluble      |              |              |
| Auto-ignition point | > 370 °C       |              |              |
| Flash point         | 158 °C         | 144°C        | 137°C        |
| Specific gravity    | 1,032 g/ml     | 1,020 g/ml   | 1,013 g/ml   |
| Viscosity at 20 °C  | ± 210.000 cPs  | ± 70.000 cPs | ± 25.000 cPs |



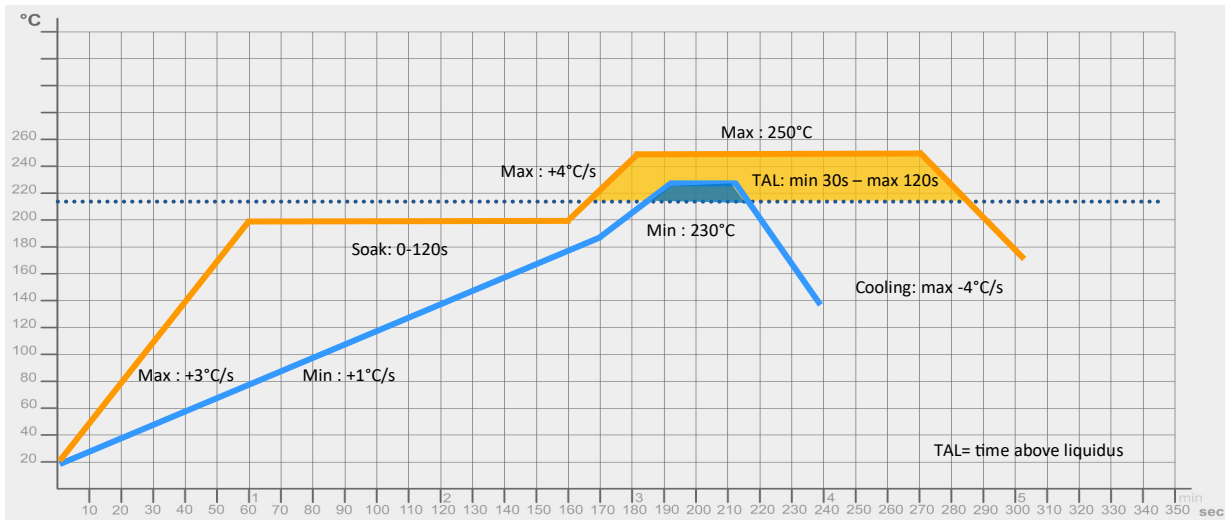
## Soldering profile recommendations for IF 8300

Regardless of the used soldering technique, it is always important to know the physical limitations of the components and base materials to be soldered and to adapt the soldering profile to these limitations.

**Hand soldering :** For Sn(Ag)Cu alloys, the advised working temperature is between 320°C and 390°C. For SnPb(Ag) alloys, this is between 320°C and 360°C. For more dense metals like Nickel, the temperature may be elevated. Choose the correct soldering tip: to reduce the thermal resistance, it is important to create a large contact surface with the component and solder pad. The use of a good soldering station is important in order to always have the correct temperature on the soldering joint. Use a soldering station with a response time as short as possible. Heat up the surfaces of both component and island simultaneously. Slightly touch with the solder wire, the point where component lead, soldering island and soldering tip meet (the small quantity of solder ensures a drastic lowering of the thermal resistance). Add subsequently without interruption, the correct amount of solder close to the soldering tip without touching the tip.

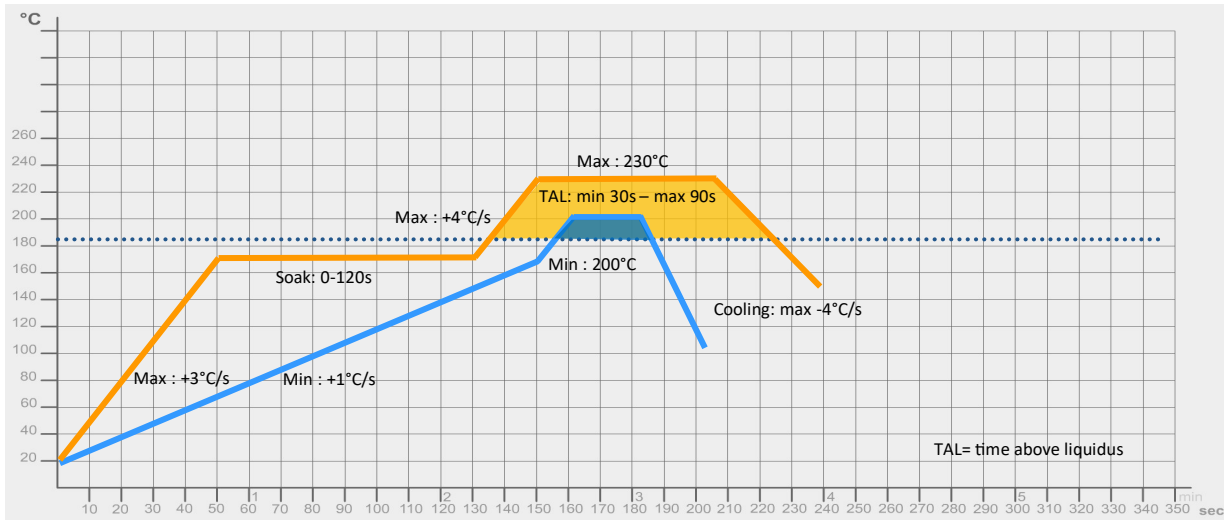
**Reflow soldering:** . The used soldering profile will mainly be determined by the used soldering alloy and the physical properties and limitations of the materials to be soldered. Both soak profiles and ramp profiles are possible. Reflow profile suggestions below and on next page.

## Reflow profile suggestions for Sn(Ag)Cu alloys





**Reflow profile suggestions for SnPb(Ag) alloys**



**Test results**

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

| Property                    | Result         | Method                        |
|-----------------------------|----------------|-------------------------------|
| <b>Chemical</b>             |                |                               |
| Flux designator             | <b>RE / LO</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  |
| <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  |





## Health and safety

Please always consult the safety datasheet of the product.

## Availability

The IF8300-series is available in the following packaging:

### IF8300

5cc syringe with and without plunger  
10 cc syringe with and without plunger  
30 cc syringe with and without plunger  
30 cc jar  
100 cc jar  
Other packaging available upon request

### IF8300-4

30cc jar with brush

### IF8300-6

30cc jar with brush

Trade name : BGA Gel Fluxes IF 8300 series, IF 8300, IF 8300-4, IF 8300-6

### Disclaimer

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