

# PRODUCT DATA SHEET



## ECOREL FREE 808.3



Low residue **LEAD FREE** solder paste  
No clean - High melting point

**ECOREL FREE 808.3** solder paste has been developed by PROMOSOL, for application that needs higher reflow temperature with a no-clean process. It can be reflowed under air, nitrogen or in vapour phase with a wide process window.

<u>SPECIFICATIONS</u>	<b>According to C 90 550 IPC TM 650</b>	
Alloy	Sn96 Ag	
Powder size distribution	25 - 45	
Melting point (°C)	221	
Metal content (%)	90	
Residue after reflow soldering (%)	50	
Acid index on organic part (mg KOH/g)	103	
Halogen content (%)	0	
Viscosity* (Pa.s 20°C) <i>*Brookfield RVT - TF at 5 rpm.</i>	1000	
<u>FUNCTIONAL TESTS</u>	<u>NORM</u>	
Flux classification	FC L0 F-SW 33 123	C 90550 ANSI/J-STD-004 DIN 8511 ISO 9454
Solderballing test	Class 1	C 90550
Copper mirror	pass	ANSI-J-STD-004
Chromate paper	pass	ANSI-J-STD-004
Copper corrosion	pass	ANSI-J-STD-004
Surface Insulation Resistance OHMS After 21 days		ANSI-J-STD-004
85°C - 85 % RH - 50 Volts	> 10 <sup>10</sup>	
25°C - 65 % RH	> 10 <sup>12</sup>	



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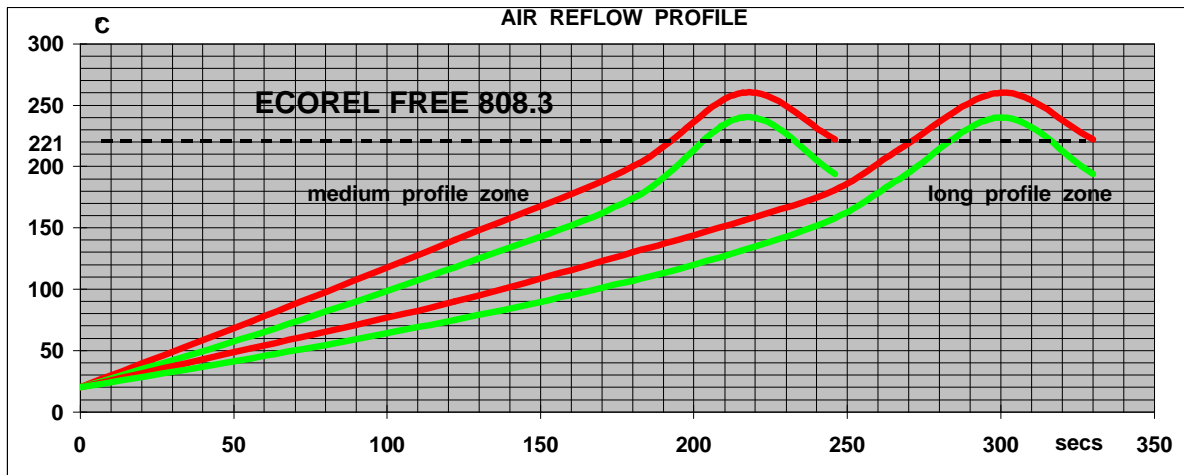
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## REFLOW THERMAL PROFILE

The under graph indicates, according to thermal mass of PCB and mounted components, the optimal profile zone which have to be respected to obtain a good reflow under air without solderball.



By using a nitrogen atmosphere, you can enlarge your process window towards reflow thermal profile. This permits better wetting and coalescence.

A regular preheat temperature rise is preferable to a too long plateau, in order to avoid solderbeading to get a shining joint and a uniform residue distribution.

## SLUMP

ECOREL FREE 808.3 solder paste is particularly easy to print down to 0.3 mm pitch.

## SOLDERPASTE PREPARATION

Before printing, it is essential to properly mix the solderpaste, either manually with a spatula, or by doing several preliminary prints on the stencil.

## PACKAGING

- ✦ Jars : 250g - 500 g and 1 kg.
- ✦ Cartridges : 700 g and 1,4 kg.
- ✦ In Proflow cassette of 850 g.

## STORAGE

To ensure the best product performance, the recommended storage temperature range is 5°C to 10°C. A shelf life of 9 months is achieved under these conditions in jars. In cartridges, and Proflow cassette, the shelf life is 6 months.

Before use, allow several hours at room temperature for the paste to stabilize. Once a jar has been opened, a refrigerated storage is no longer required.

## HEALTH AND SAFETY

Please refer to MSDS.

*The information given herewith is designed only as a guidance and is not to be considered warranty of PROMOSOL.  
Réf. FPCGB 80832 TSI PRO V.02 (12.15/99)*



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