

ECOREL™ EASY 802S-803S



Low residue no-clean solder pastes

FEATURES

ECOREL™ EASY 802 S / 803 S no-clean solder pastes have been developed for fine pitch printing. Applied by squeegees or closed head, the deposit has a very sharp definition even after several hours abandon time on stencil. Their rheological properties are suitable for “pin in paste” process.

SPECIFICATIONS

ECOREL™ EASY	802S	803S
Alloy	Sn62 Pb Ag2	Sn63 Pb
Melting point °C	178	183
Powder size distribution	25 - 45 microns	25 - 45 microns
Metal content (%)	89,5 ± 0.5	89,5 ± 0.5
Residue after reflow soldering (%)	57 – 64	57 – 64
Halogen content	no halogen	no halogen
Viscosity* (Pa.s at 20°C) <small>* Brookfield RVT, TF at 5 RPM</small>	650 – 850	650 – 850

CHARACTERISTICS

Long stencil life : more than 8 hrs.

Abandon time on the stencil more than 6 hrs with excellent print restart.

Printing speed : 60-150 mm/sec.

Solderballing resistance at high % RH.

Good wettability on all finishes.

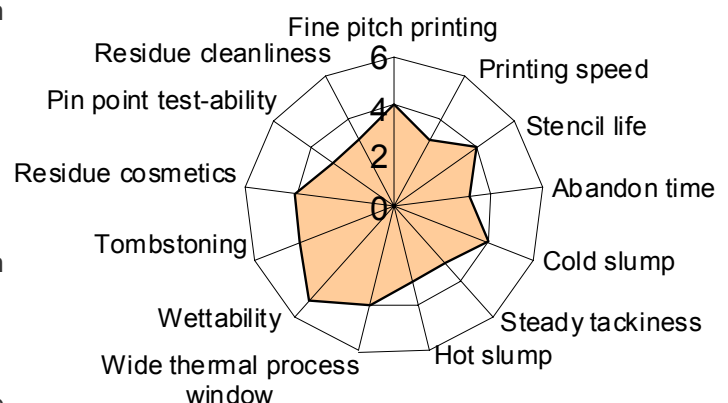
Stable tack : more than 16 hrs at 22°C between printing and component placement.

No slump out by preheat.

Slight yellow residue after reflow, pin point test probe compatible.

No halogen.

High SIR – No residue deterioration during accelerated ageing.



FUNCTIONAL TESTS	Results	Procedures
Flux classification	RE L0	ANSI/J-STD-004
	F-SW 33	DIN 8511
	123	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
S.I.R. OHMS	pass	ANSI/J-STD-004
after 21 days		
85°C - 85 % RH - 50 Volts	$> 10^9$	
end of cycle		
20°C - 65 % RH	$> 10^{10}$	

PACKAGING

Jar	250 g or 500 g
Cartridge	700 g or 1400 g
PROFLOW cassette	800 g

STORAGE & SHELF LIFE

To ensure the best product performance, the recommended storage temperature range is 5°C to 10°C. For an optimal preservation, store cartridges in vertical position, tip downwards.

PROCESS PARAMETERS

Solder paste preparation

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

Printing

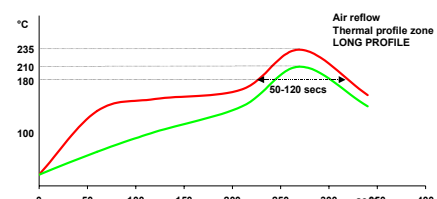
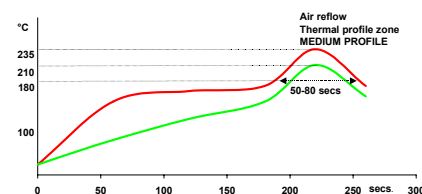
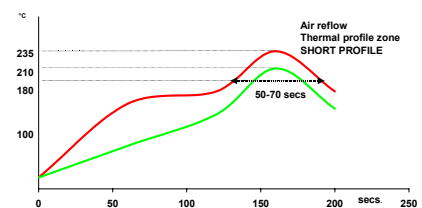
ECOREL™ EASY 802 S and ECOREL™ EASY 803 S solder pastes are particularly easy to stencil print down to 0.3 mm pitch and up to 150 mm/sec. squeegee speed.

Reflow thermal profile

Graphs beside indicate, the optimal thermal profile zone according to PCB and component thermal mass.

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

Nitrogen atmosphere permits good coalescence and excellent wet ability inside a large reflow process window.



HSE

Contains lead. Do not handle without gloves. Read MSDS before use.

No issues when used as recommended.

This data is based on information that the manufacturer believe to be reliable and offered in good faith. In no event will INVENTEC be responsible for special, incidental and consequential damages. The user is responsible to the Administrative Authorities (regulations for the protection of the Environment) for the conformity of his installation.

FPW.SV.10265.006 - 06/04/2010