

ECOREL™ EASY 802S / 803S



Low residue no-clean solder pastes

BENEFITS

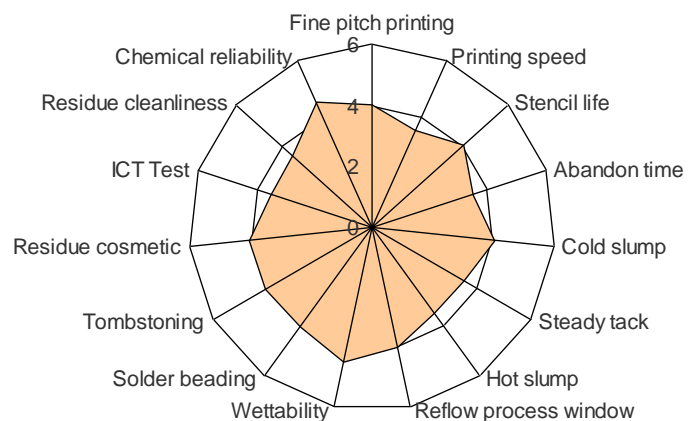
ECOREL™ EASY 802 S / 803 S no-clean solder pastes have been developed for fine pitch printing. Applied by squeegees or closed head, the deposit has a very sharp definition even after several hours abandon time on stencil. Their rheological properties are suitable for “pin in paste” process.

FEATURES

ECOREL™ EASY	802S	803S
Alloy	Sn62Pb36Ag2	Sn63Pb37
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 25°C)	135	135
*Spiral pump Malcom – 10 RPM	Typical value	Typical value

CHARACTERISTICS

- Long stencil life, > 8 hrs.
- Abandon time on the stencil, > 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.



Standards tests	Results	Procedures
Flux Classification	ROL0	ANSI/J-STD-004
	113	ISO 9454
Solder balling test	Pass	ANSI/J-STD-005
Copper mirror	Pass	ANSI/J-STD-004
Chromate paper	Pass	ANSI/J-STD-004
Copper corrosion	Pass	ANSI/J-STD-004
SIR (Ohms)	Pass	ANSI/J-STD-004
After 21 days 85°C – 85% RH – 50 V	> 10 ⁹	
End of cycle 20°C – 65% RH	> 10 ¹⁰	

PACKAGING

Jars	250g or 500g	12 months
Cartridges	700g or 1400g	9 months
Proflow cassettes	800g	9 months

STORAGE & SHELF LIFE

To ensure the best product performance, the recommended storage temperature range is 0°C to 10°C. Store at room temperature at least four hours before use. 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

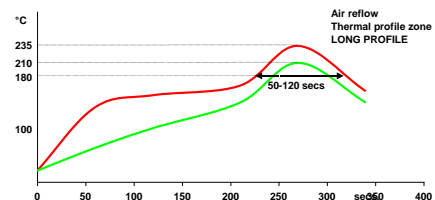
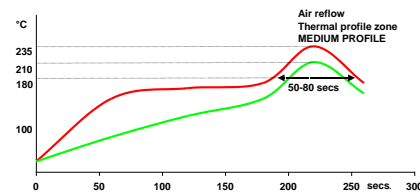
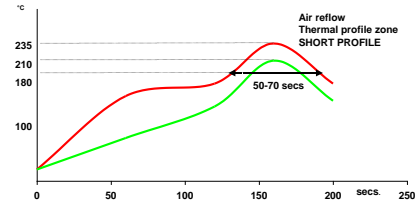
ECOREL™ EASY 802 S and **ECOREL™ EASY 803 S** solder pastes are particularly easy to stencil print down to 0.3 mm pitch and up to 150 mm/sec. squeegee speed.

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. Use in well-ventilated areas. Safety glasses and gloves should always be worn when handling the flux.

No issues when used as recommended. Please refer to Material Safety Data Sheet before use. INVENTEC Material Safety Data sheets can be found at www.quickfds.com

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.

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