Alpha-Fry™ EGP-130

Halogen Free, No-Clean Solder Paste

DESCRIPTION

Alpha-Fry EGP-130 paste flux system has been designed for fine pitch, lead-free applications. It is a No Clean, REL0 formulation designed to offer the SMT process stable viscosity and thixotropy with continuous printing. The product chemistry is compatible with SAC305 (96.5%Sn/3.0%Ag/0.5%Cu) or SAC0307 (99%Sn/0.3%Ag/0.7%Cu) alloys. It has also been formulated to provide resistance to high temperature pre-heating, solubility on ultra-fine pitch pads and reduce the occurrence of solder balling defects.

TECHNICAL SPECIFICATION

Item	Specification
10 rpm Malcom Viscosity For: 1) 89.0% metal loading SAC305 (96.5%Sn/3.0%Ag/0.5%Cu) / SAC0307 (99%Sn/0.3%Ag/0.7%Cu) 2) 88.5% metal loading SAC305 (96.5%Sn/3.0%Ag/0.5%Cu) / SAC0307 (99%Sn/0.3%Ag/0.7%Cu)	1) 1900 poise 2) 1700 poise
Powder Size Distribution	20 - 38µm
JIS-Z-3284 App. 9 Tack Force (@24 hrs)	> 100 gf
Stencil Life	> 8-hr
JIS-Z-3284 App. 8 Hot Slump	No Contact; Pass
Residue Color	Clear, Colorless
JIS-Z-3284 App. 11 Solder Ball Test	Flocculation Rate : 1; Pass
Halide Content	Halide Free
JIS-Z-3284 App. 4 Corrosion Test (Flux Residues)	No color change; Pass
JIS-Z-3197 8.4.2 Copper Mirror Corrosion Test	No copper peeled; Pass
JIS-Z-3197 8.1.4.2.3 Silver Chromate Paper Test	No color change; Pass
JIS-Z-3284 App. 14 Migration Test	>1X10^{9} ohm; Pass
SIR IPC J-STD 004B	>1X10^{9} ohm; Pass
SIR Bellcore GR-78-CORE	>1X10^{10} ohm; Pass
JIS-Z-3284 App. 10 Wetting/Dewetting Test	Copper Plate: Class 2; Pass
Shelf Life at 0 - 10ºC. Thaw to reach room temperature before opening the lid for use	6 months (from date of mfg.)
Available Packaging	500 gm jar

APPLICATION

Printing*
- 0.15 - 0.25 kg/cm blade pressure - 10-50 mm per second squeegee speed - 1.5-2.0 cm diameter paste roll - 1 – 20 mm/sec separation speed (snap off) - 10-15 mm lift height

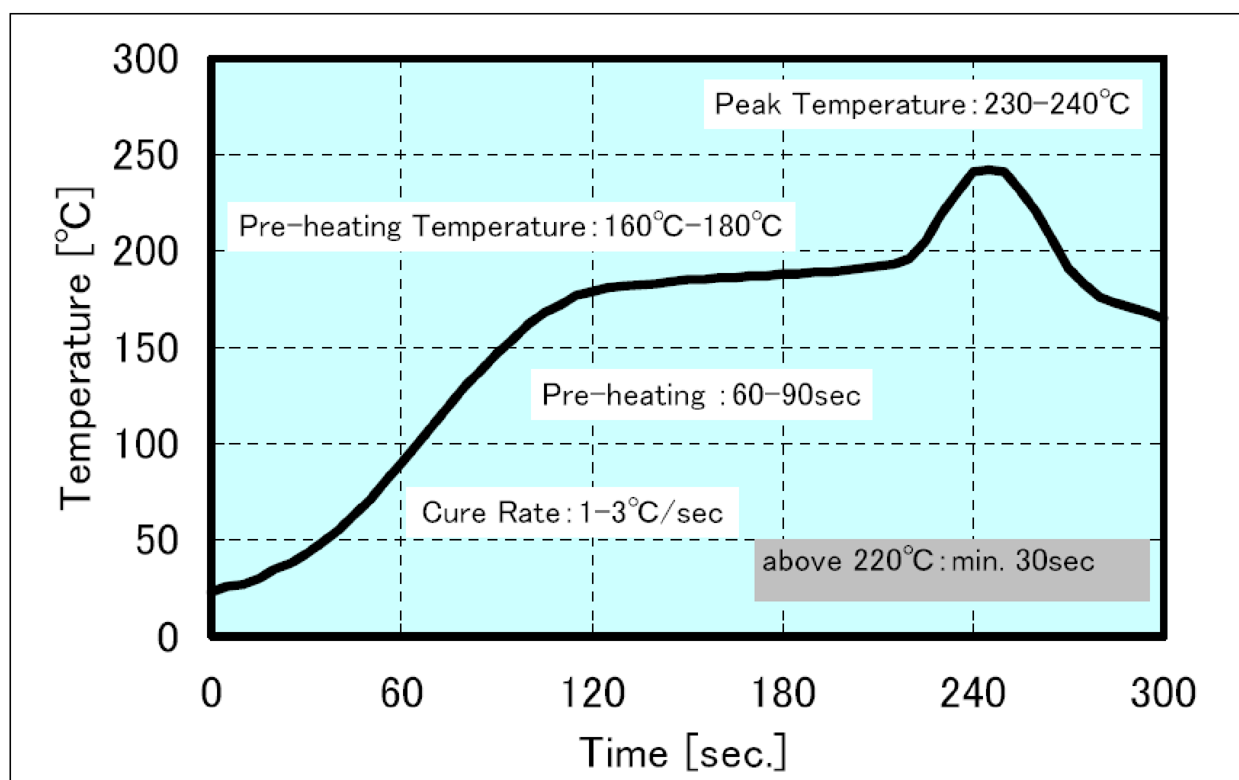
***On 0.10mm - 0.15 mm (4 - 6 mil) thick stencil for 0.4 - 0.5 mm (0.016" - 0.020") pitch**

Reflow
- Dry Air or Nitrogen - Initial Ramp: 1 - 3°C per second. - Soak time at 160 - 180° C: 60 to 90 seconds - Time above Liquidus: 30 seconds - Peak temperature: 230 to 240°C - Cooling rate should be 3 - 7°C per second

No. 266 Guangtian Road, Tangxiayong Community, Songgang Street, Baoan District, Shenzhen City 518105, China.
中国深圳市宝安区松岗街道塘下涌社区广田路 266 号 邮编：518105, (86) 755 2705 1100

alpha-fry™

Fig 1. Typical Air Reflow Profile for Alpha-Fry™EGP-130
SAC305 & SAC0307



Note: These are profiles that were tested in the lab with acceptable reflow and coalescence performance, optimization to each board application should still be carried out by users to ensure best results.

HEALTH & SAFETY

Observe standard precautions for handling and use, such as well-ventilated areas and avoidance of prolonged or repeated contact with the skin. Suitable protective clothing should be worn to prevent the material from coming in contact with skin and eyes.

For more information, please refer to the Material Safety Data Sheet.

The information contained herein is based on data considered accurate and is offered at no charge. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for any loss or injury arising out of the use of this information or the use of any materials designated.

No. 266 Guangtian Road, Tangxiayong Community, Songgang Street, Baoan District, Shenzhen City 518105, China.
中国深圳市宝安区松岗街道塘下涌社区广田路 266 号 邮编：518105, (86) 755 2705 1100
an Alent plc Company