



ESL EUROPE

SOLDER PASTES &
THICK-FILM MATERIALS

8 COMMERCIAL ROAD
READING, BERKSHIRE, RG2 0QZ, UK

T: +44 (0) 118 918 2400
F: +44 (0) 118 986 7331

www.solderpaste.co.uk

ENVIROFLO™ 305 Lead-free Solder Paste



A well established product designed to meet the demands of the surface mount industry as a reliable replacement for conventional lead solders.

Based on the 96.5Sn/3Ag/0.5Cu (SAC305) alloy, 217°C eutectic, EnviroFlo 305 offers superior paste performance exhibiting excellent screen life, printing characteristics, component, acceptance, anti-slump and reflow properties. The resin is colophony-free and the clear benign residue may be left on the processed board or removed using commercially available cleaning solvents.

RESIDUE PERFORMANCE DATA

Test	Specification	Result
Silver Chromate Paper Test: (Test for Halides)	J-STD-004 / IPC-TM-650	Pass
Copper mirror Test:	J-STD-004 / IPC-TM-650	Pass
Surface Insulation Resistance:	J-STD-004 / IPC-TM-650	Pass
Electro-migration:	J-STD-004 / IPC-TM-650	Pass

Every batch of solder paste manufactured by ESL is screen-printed, populated with live components and reflowed using a 4 zone convection oven for product testing before final QA inspection.

PASTE DATA: Alloy: SAC 305 (96.5% Sn / 3% Ag / 0.5% Cu) - 90% nominal solids

Particle Size: 25 - 45 microns (Type 3)

Packaging: 500g or 1000g Jars, Green Semco Cartridges and 800g ProFlow™ Cassettes

Storage: 4°C - 20°C - May be refrigerated - Paste will need to be taken out of the fridge at least 4 hours before use.

Viscosity: 725 ± 25 kcps

Shelf Life (at 20°C): 6 months

ESL Europe EnviroFlo 305 0712-A

ESL Worldwide

ESL ElectroScience (USA) • 416 East Church Road • King of Prussia • PA 19406-2625 • U.S.A • Tel: +1 610-272-8000 • Fax: +1 610-272-6759 • Sales@ElectroScience.com

ESL Nippon • Sukegawa Bldg. 6th floor, 3-4 Yanagibashi 1-chome, Taito-ku, Tokyo 111, Japan • Tel: +81-3-3864-8521 • Fax: +81-3-3864-9270 • Sales@ESL-Nippon.co.jp

ESL China • Room #2712, Far East International Plaza, No.317 Xianxia Road, Changning District, Shanghai, China 200051 • Tel: +86-21-6237-0336 • Fax: +86-21-6237-0338 • ESLChina@eslshanghai.net

ESL Taiwan • 14F, No. 168, Tun Hwa N. Road, Sungsan District, Taipei, Taiwan • Tel: +886-975-553-612 • dshih@esl-taipei.com

ESL in Korea • AMT, #109-405, 85(4/2), Bakdal 2-Dong, Manan-Ku, Anyang-Si, KyunggiDo, South Korea • Tel: +82-31-466-0651 • Fax: +82-31-466-0658 • yumikim@esl-amt.co.kr

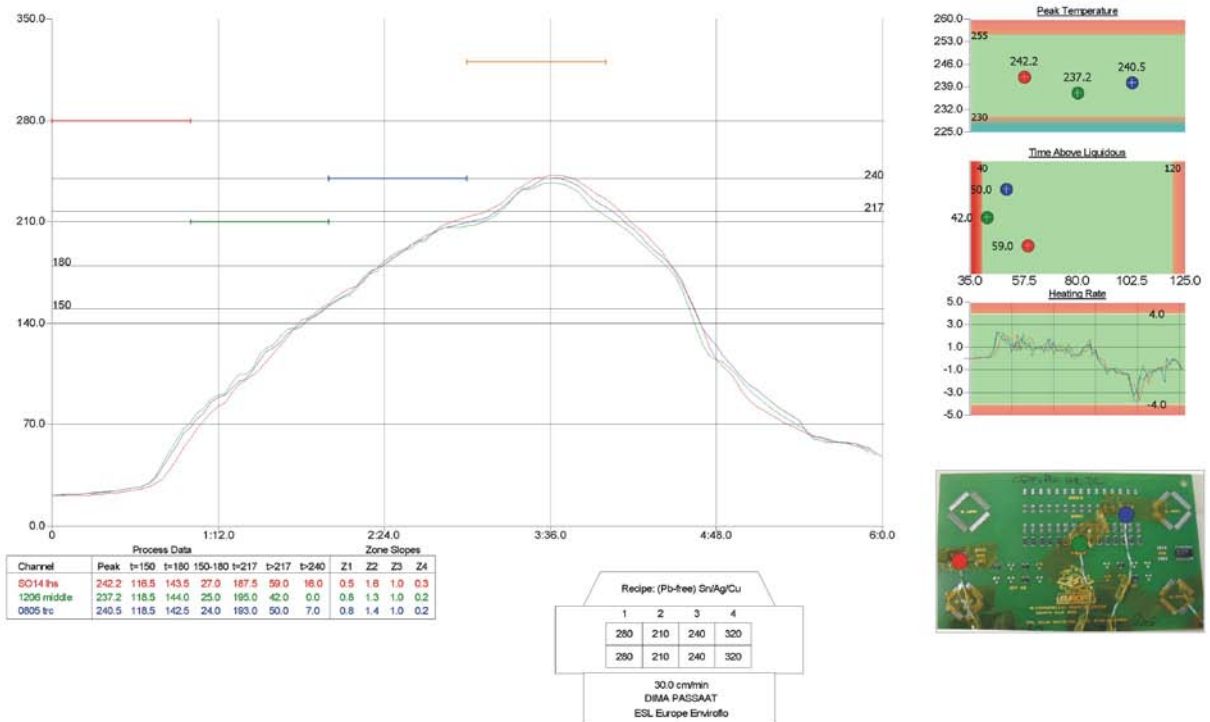
See Caution and Disclaimer on next page.

PRINTING: **Screen:** Recommended 120 microns thick, electro-formed, laser cut stencil with 5 - 15% reduction in aperture compared to pad area to eliminate mid-chip beading.
Print speed: 20 - 100 mm/sec
Screen-life: > 8 hours @ 19 - 28 °C
Tack time: > 24 hours @ 19 - 28 °C

REFLOW: A standard reflow profile is shown. This is used to test EnviroFlo™ paste. The following guidelines are used:

Ramp up: 0.5 - 2.5 °C / sec.
Liquidus: Hold above 217°C for between 40 and 120 seconds (typically 15 - 35 °C above liquidus).
Cool down: 2 - 5 °C / sec.

CLEANING: Not usually required but populated boards can be cleaned in commercially available solvents.



ESL Europe EnviroFlo 305 0712-A

CAUTION: Proper industrial safety precautions should be exercised in using these products. Use with adequate ventilation. Avoid prolonged contact with skin or inhalation of any vapours emitted during use or heating of these compositions. The use of safety eye goggles, gloves or hand protection creams is recommended. Wash hands or skin thoroughly with soap and water after using these products. Do not eat or smoke in areas where these materials are used. Refer to appropriate MSDS sheet.

DISCLAIMER: The product information and recommendations contained herein are based on data obtained by tests we believe to be accurate, but the accuracy and completeness thereof is not guaranteed. No warranty is expressed or implied regarding the accuracy of these data, the results obtained from the use hereof, or that any such use will not infringe any patent. ElectroScience assumes no liability for any injury, loss, or damage, direct or consequential, arising out of its use by others. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular use, before using it. User assumes all risk and liability whatsoever in connection with his intended use. ElectroScience's only obligation shall be to replace such quantity of the product proved defective.