Silver Paste Ag 3801

chimet S.p.A.

REFINING AND FINE CHEMICALS · THICK FILM DIVISION

Lead Free SILVER PASTE P40 Rev 1

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This silver paste (low silver content) is formulated for screen printing application on float glass, for **fine line** printing specially (<0.4 mm width, depending on printing conditions and combined with Ag 380x members). The paste is based on low particle size powders allowing a higher conductivity and producing a more dense and sintered fired film. The product is especially recommended when very high chemical resistance is necessary. It also prevents marks caused by the soldering of circuit connectors.

PROCESSING CONDITIONS

Printing: typical industrial parameters 200 – 250 mesh stainless steel screen, or 77 - 90 wires polyester screen.

Soldering: 47% Sn, 40% Pb, 10% Bi, 3% Ag solder at 230°C (best conditions).

Shelf life: 8 months @ 4°C-10°C, 6 months @ 10-24°C

Thinners: Thinning is not recommended, the paste is optimized to the correct viscosity for screen printing. Use the Chimet 0203IT to replace solvent losses (% higher that 0.1% could affect conductivity).

TYPICAL PROPERTIES

Metal content:	
Ag	**65.0 %**
Sheet Resistance:	
4 µm fired film thickness	**6.5 mΩ/□**
Resistivity:	
	2.6 µΩ · cm
Viscosity:	
	46 – 60 Pa.s

STANDARD TEST CONDITIONS

Viscosity test:

Viscosimeter Brookfield DV II, Cylinder ø = 4 cm h =7 cm , Spindle 7 R at 10 r.p.m. and 23.5 (± 0,5)°C.

Resistence test:

Circuit:	1000 x 1 mm
Printing :	250 mesh
Drying :	120°C, 10 minutes
Firing:	flash firing @ 740°C, 4 minutes
Fired thickness:	Taylor-Hobson profilometer

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