TECHNICAL DATA SHEET

Back-side Ag paste for Silicon PV cell.

Chimet Silver Paste Ag 2711 SC is designed to produce effective rear-side metallisation of classical silicon PV cells. Its low silver content combined with rheological properties allowing for high speed printing contribute to low paste usage and significant cost reduction in the production of high efficiency silicon solar cells. Paste Ag 2711 SC is formulated as lead- and cadmium-free product. It is compatible with Al back side pastes and cofiring with front Ag and back Al metallisation. During firing silver paste Ag 2711 SC sinters to form a dense layer with high electrical conductivity and permitting strong mechanical bond after soldering with interconnection ribbon.

STANDARD TEST CONDITIONS

Viscosity: Determined on Brookfield DV II Viscosimeter, small sample adapter 6R, spindle 14R, @ 10 r.p.m. and 25 ($\pm$0.5) °C.

PROCESSING CONDITIONS

Printing: typical industrial parameters: 250 – 300 mesh stainless steel screen, EOM 4-15 μm, squeegee medium hardness, 160- 250 mm/s, 60-80 N.

Drying: suitable for inline drying conditions: circulating air at >175°C 10 min; IR inline at 225 - 275°C for 30 seconds. Please determine best settings according to your dryer.

Firing: Infrared fast firing belt furnace: Paste Ag 2711 SC co-fires effectively with front Ag and back Al pastes in standard firing profiles for the production of high efficiency silicon PV cells.

Soldering: suitable for standard ribbon materials, leaded and lead-free solder (e.g. Pb 62 Sn/36 Pb/2 Ag) and industrial soldering equipment.

Shelf life: 9 months @ 4°-10°C

Thinners: Thinning is not recommended, the paste is optimized to the correct viscosity for screen printing. Use the Chimet 0200 IT to replace solvent losses, by contacting the local Chimet technician

Recommendation: Before use please stir paste gently with a spatula for homogenisation. Keep paste at room temperature for 12 h before opening container.

TYPICAL PROPERTIES

Viscosity:	75 – 125 Pa.s
Solids:	56%
Silver content:	52%