



SILVER CONDUCTOR PASTE FOR SOLAR CELLS

Technical Data Sheet

FS-0734

APPLICATION

Silver conductor paste **FS-0734** is specially designed to form the ohmic contact to the n- type silicon front side of mono- or multicrystalline silicon solar cells by screen printing method.

The product can be fired over a broad range of conditions including cofire process techniques with back contact pastes. FS-0734 is compatible with other Analog™ pastes for solar cells metallization.

BENEFITS

- Lead and cadmium free composition
- Suitable for SiN_x and TiO_x anti-reflection coatings
- Suitable for 50-80 Ω/□ emitters
- High efficiency
- Fine line printing

TRANSPORTATIONS

Tightly capped plastic containers adapt to any kind of transport in compliance with the applied regulations.

STORAGE CONDITIONS

In original manufacturer's packaging

- storage place: roofed storage rooms and other covered storage facilities;
- storage temperature: from +5 to +30°C;
- relative humidity not more than 85%;
- avoid contacts with aggressive medium;
- do not expose to direct sunlight.

BEFORE USE

The paste must be kept at the temperature of (22±3) °C for 3 hours and then thoroughly stirred.

THINNING

Thinning is not recommended, since the pastes are supplied at the correct viscosity for application. If thinning becomes necessary to replace evaporated solvent, contact your local Monocrystal representative for thinning recommendation.

TYPICAL PROPERTIES

Solid Content, % mass	87,5
Viscosity, (Haake RV-1, Cone 35/°1, D=10 s ⁻¹ , T=21,0±0,1 °C) , Pa·s	70-120
Resistivity (normalized to 25µm on alumina), mOhm/sq., not more than	15
Bowing (200 micron wafer, 156x156), mm, not more than	3,0

PROCESSING RECOMMENDATIONS

Printing	230-325 mesh
Drying	250-300 °C for 1-5 minutes
Firing Range	750-950 °C
Firing Time at Peak Temperature	3-90 seconds
Firing Medium	Air
Shelf life	6 month
Soldering	62Sn/36Pb/2Ag at 220 – 240 °C

Firing conditions can be optimized to meet customer requirements

