



Aluminum (A108) Photovoltaic Metallization Paste	Version	1.2
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(A108) SOLAR CELL ALUMINIUM PASTE (LEAD FREE)

PRODUCT DESCRIPTION

This product is designed for use as the back electrode on single or polycrystalline silicon solar cells.

PRODUCT BENEFITS

- Low Bowing – Typical bowing < 1.5 mm for 180um thickness wafer
- High Efficiency - Good Back Surface Field Effect
- Good Adhesion
- Lead-free
- Cadmium-free
- RoHS compliant

TYPICAL PROPERTIES

Rheology:	Thixotropic, screen printable paste
Viscosity:	35±10 kcps (Brookfield DV-II+CPC,#51, 38.4sec-1, 25°C)
Shelf life: (at 25°C)	6 months
Resistivity	< 15mOhm/sq. at 30um
Solids Content	70%-80%
Thinner	Not Recommended



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PROCESSING SUMMARY

Screen mesh/Emulsion	165-200 mesh / 10-30 μm
Drying	2-10 min at 200-250°C
Dried Thickness	40-50μm
Fired Thickness	40-50μm
Firing	Furnace: Infrared Heated Zone: 165 inches, Belt Speed 160 IPM Set Points: Zone 1-3: 300 °C, Zone 4: 365 °C Zone 5: 465 °C, Zone 6-8: 550 °C Zone 9: 600 °C, Zone 10 : 810 °C Zone 11 : 920 °C
Peak Firing Temp	700-800°C

TYPICAL FIRING PROFILE

