

# SOL560 Series



*efficiency*

Patent Pending

FRONT-SIDE PASTE



## Metallization Paste for Low Temperature Processing

- For HJT cells (a-Si), front & back grids

Heraeus' SOL560 is a fast curing, screen printable, low temperature processing paste especially for use as a contacting finger-line paste for HJT solar cells. It also has higher efficiencies and greater adhesion than commercially available materials.

The SOL560 is designed for the curing temperature range of heterojunction solar cells of less than 200°C. The paste shows an excellent adhesion on ITO or other TCO materials and provide PV cell manufacturers with improved printability and adhesion, excellent line conductivity and minimal pinholes. The SOL560 can be stored and processed at room temperature, which relieves PV cell manufacturers from time-consuming freeze and unfreeze processes.

### KEY BENEFITS

- For high cell efficiencies
- Storage at room temperature
- Fast cure time
- Low resistivity
- Good adhesion on TCO

## TYPICAL PROPERTIES

### Wafer types:

- HJT

### Suitable for line openings down to:

45  $\mu\text{m}$

### Solid content:

86.7  $\pm$  1.5%

### Fineness of Grind (FOG):

- 4th scratch:  $\leq$  12  $\mu\text{m}$
- 50%:  $\leq$  8  $\mu\text{m}$

### Viscosity:

HBT Cone and Plate Viscometer (Brookfield):

100–200 kcps

- CPE-51 spindle, @ 1 RPM, 25°C

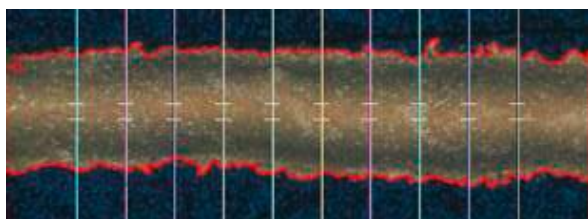
**Resistivity:** < 15 m $\Omega$ /sq/mil

**Adhesion (on HJT cell):** > 1N

**Average line height:** 16  $\mu\text{m}$



**Average line width:** 49  $\mu\text{m}$



## RECOMMENDED PROCESSING GUIDELINES PRINTING

### Printing (Screen Parameter Recommendations):

- $\geq$  50  $\mu\text{m}$  opening
- 325–360 mesh
- 16  $\mu\text{m}$
- stainless steel wire

**EOM thickness:** 13–17  $\mu\text{m}$

### Curing:

180–200°C curing for 10–30 minutes

### Storage:

#### DO NOT REFRIGERATE.

Store in a dry location at 5°C–25°C. Allow paste to come to room temperature prior to opening. Spatulate well before using.

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