

# Low Temperature Silver Paste for HJT Solar Cells MH-2300 Series



The silver paste is specially designed for N-type heterojunction solar cells (HJT). **MH-2300** provides an outstanding finger aspect ratio improvement resulting in cell efficiency increase by more than 0.1 percent with multiwire assembly and 0.2 percent with busbar assembly.

## KEY BENEFITS

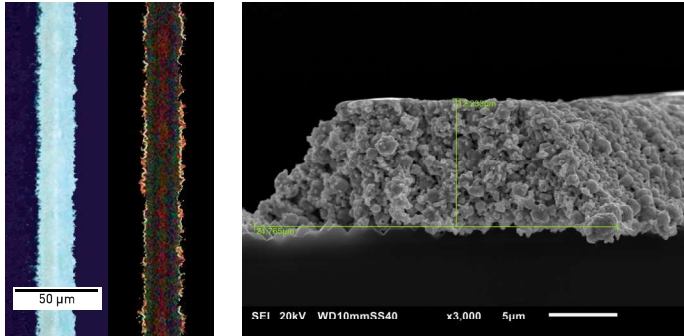
- low consumption per cell
- high efficiency gain (up to +0.2%)
- outstanding aspect ratio for finger lines results in higher short circuit current
- significantly faster curing time
- ultra fine-line printing without breaks and interruptions
- easy to store: can be stored at room temperature

## LOWER PASTE CONSUMPTION PER CELL SIGNIFICANTLY FASTER CURING TIME

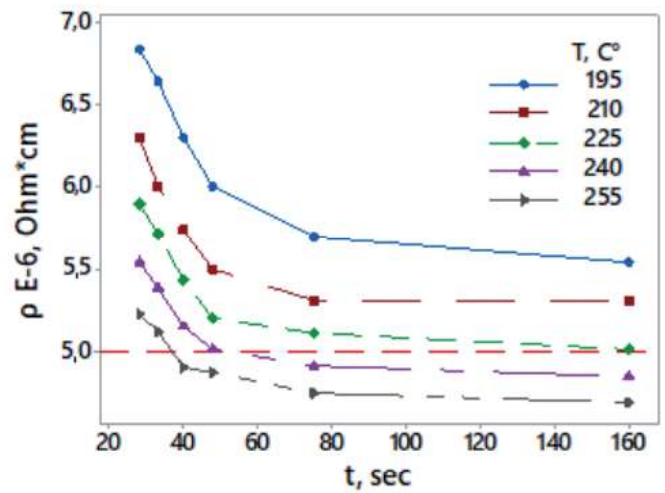
MH-2300 Series silver paste is characterized by reduced paste consumption at screen printing still allowing high efficiency of HJT solar cells. The product can be customized for conventional busbar and modern multiwire solar cell assembly technologies.

MH-2000 organic composition provides outstanding aspect ratio and ultra fine-line printing.

The highest aspect ratio allows paste printing with 10% lower laydown



Excellent printing quality provides high short circuit current resulting in higher cell efficiency



MH-2300 provides 10% better resistivity with 3 times shorter curing time which results in excellent equipment throughput.

### TYPICAL PROPERTIES

Dynamic viscosity* [Pa·s]	60–110
Fineness of grind [µm]	4th scratch = 10 µm 50 % = 5 µm
Solid Content [% mass]	90±1
Shelf life [month]	6
Wet [g/wafer]	up to 0.08 g for multiwire cell

### PROCESSING RECOMMENDATIONS

Printing:	400/18 40–50 µm opening 360/16 32–40 µm opening 380/14 ≤ 32 µm opening 430/13 ≤ 28 µm opening 480/11 ≤ 25 µm opening
EOM thickness:	10–20 µm
Curing:	Typically cured in a circulated air oven with set points of 180–200°C in 5–15 minutes
Storage:	Store in a dry location at 5°C–25°C

\*[Spindle – Ti 35/1: HAAKE RotoVisco 1, at 10 s-1, 25°C]

#### CHINA

Monocrystal PV Technology (Changzhou) Co., Ltd.  
No.97, Liuyanghe Rd., Trina PV Park, New District, Changzhou City, Jiangsu, China, 213031  
Phone: +86 519 8169 1618 ext.134  
Fax: +86 519 8169 1619  
sales@monocrystal.cn

#### TAIWAN

Monocrystal Co., Ltd.  
No. 450, Sec 1, Dong Xing Rd., Chubei City, Hsinchu Country, Taiwan, 30261  
Phone: +886 3 550 6036  
Fax: +886 3 550 6036

#### HEADQUARTERS

Monocrystal  
4/1 Kulakov pr., Stavropol, Russia, 355035  
Phone: +7 [8652] 56-31-41  
Fax: +7 [8652] 56-15-98  
pv-pastes@monocrystal.com