

Conductors

SOL230



Back Side Silver for Solar Cells

Description:

SOL230 is a back side tabbing Ag conductor for single and multicrystalline silicon solar cell wafers.

SOL230 provides high coverage for reduced usage of wafers while maintaining excellent adhesion to the Si cell. SOL230 is a Pb and Cd free material that has excellent solderability in both leaded and no lead solders.

● Key Benefits:

- Excellent solderability
- High adhesion strength using Pb or Pb-free solders
- Low contact resistance
- Cd and Pb free
- Ease of printability
- Co-fireable with back Al and front Ag pastes

● Typical Properties:

Viscosity

80-140 Kcps; Brookfield HBT UC and SP
@ 10 rpm, 25°C

Solids:

72.5 ±1%

Solderability:

Excellent
96.5Sn/3.0Ag/0.5Cu
Use with low solids, no clean Flux

Wafer Types:

Mono and multi crystalline

● Recommended Processing Guidelines:

Printing:

200-230 mesh stainless steel screen
10-14 micron emulsion

Drying:

Typically dried in an IR dryer with set points of 250-300°C in less than 20 seconds or 150°C for 10 minutes in circulated air oven.

Thickness:

7 - 10µm fired film

Firing:

IR Furnace with Actual Wafer
Peak Temperature at 725 -825°C

Thinner:

RV-372

Warranty:

Material guaranteed to meet specifications for 6 months from date of shipment.

Storage:

Store in a dry location at 5°C-25°C.

DO NOT REFRIGERATE.

Allow paste to come to room temperature prior to opening.

Spatulate well before using.

YY0908.3

Conductors

SOL230



Back Side Silver for Solar Cells

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

Americas
Heraeus Incorporated
Thick Film Materials Division
24 Union Hill Road
West Conshohocken, PA 19428
USA
Phone: +1 (610) 825-6050
E-Mail: techservice.hcd@heraeus.com
Internet: www.thickfilm.net

Europe
W.C. Heraeus GmbH
Thick Film Materials Division
Heraeusstr. 12-14
63450 Hanau
Germany
Phone: +49 (6181) 35-5466
E-mail: th-info@heraeus.com
Internet: www.heraeus-th.com

Asia
Heraeus Materials Technology
Shanghai Ltd.
No. 1 Guang Zhong Road
Zhuanqiao Town, Minhang District
Shanghai 201108
People's Republic of China
Phone: + 86 (21) 6442-6838
E-Mail: th.hmts@heraeus.com
Internet: www.heraeus-th.com