

3270R

Conductor

Description

3270R is a silver conductor paste designed for screenprint application of a fired conductive electrode. 3270R forms a highly adherent bond to many compositions including alumina. The paste has good rheological properties and long screen life. The film has good initial and aged adhesion and is readily solderable.

Key Features

- Excellent solderability Good initial and aged adhesion Long working lifetime on the screen



Typical Properties

|               |                                                                              |
|---------------|------------------------------------------------------------------------------|
| Viscosity     | 90 – 110 kcps, Brookfield RVT, SC4–7 spindle & 6R utility cup @ 20 rpm, 25°C |
| Solids        | > 70%                                                                        |
| Resistivity   | < 1.8 milliohms per square at 25 microns fired film thickness                |
| Solderability | 62Sn/36Pb/2Ag at 230°C<br>80 x 80 mil pad<br>100% for 3 second dip           |

Recommended Processing Guide

|                     |                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------|
| Printing Parameters | 100-250 mesh stainless steel screens<br>0.4-1.0 mil emulsion<br>Allow to level at room temperature at least 10 minutes |
| Drying Temperature  | 120-150°C for 10 minutes                                                                                               |

3270R

Conductor

Recommended Processing Guide (continued)

|                           |                                                                                                                                                                                                      |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Process Temperature (TDS) | Glass: 550-625°C peak temperature<br>Alumina: 575-650°C peak temperature<br>Anodized Aluminum: 550-600°C peak temperature<br>Dwell time (All): 8-12 minutes<br>Total cycle time (All): 40-60 minutes |
| Recommended Thinner       | Heraeus RV-252                                                                                                                                                                                       |

Americas

Phone +1 610 825 6050

electronics.americas@heraeus.com

Asia Pacific

Phone +65 6571 7649

electronics.apac@heraeus.com

China

Phone +86 53 5815 9601

electronics.china@heraeus.com

Europe, Middle East and Africa

Phone +49 6181 35 4370

electronics.emea@heraeus.com

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 particular application. The Heraeus logo and Heraeus, figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.

3270R

Conductor

Warranty

Material guaranteed to meet specifications for 6 months from date of manufacturing with proper storage.

Storage

Store in a dry location at 5 – 25°C. DO NOT REFRIGERATE. Allow paste to come to room temperature prior to opening. Spatulate well before using, as settling may occur during storage.

Americas

Phone +1 610 825 6050

electronics.americas@heraeus.com

Asia Pacific

Phone +65 6571 7649

electronics.apac@heraeus.com

China

Phone +86 53 5815 9601

electronics.china@heraeus.com

Europe, Middle East and Africa

Phone +49 6181 35 4370

electronics.emea@heraeus.com

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 particular application. The Heraeus logo and Heraeus, figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.