



# Product Change Notification

## 8331 Silver Conductive Epoxy Adhesive

ISO 9001:2015 Registered Quality System. Burlington, Ontario, CANADA SAI Global File: 004008

8331/8331D

# 8331 END OF LIFE and Replacement

**PCN Tracking Number:** 003-210323

**Notification Date:** 27 April 2021

**PCN Effective Date:** 23 July 2021

**Author:** Rick Mastroianni **Approved:** Michel Hachey 10 June 2021

**Summary:** The 8331-14G has been discontinued and replaced by part number 8331D-14G. The 8331D was formulated to remove Substances of Very High Concern (SVHC's). The 8331 will be available for a limited time as made to order product for North America only.

### Affected Product Identification

**Product Name:** 8331 Silver Conductive Epoxy Adhesive

**Product Identification:** 8331

**Use:** As a solder replacement for bonding heat-sensitive electronic components or for making conductive connections where soldering is not an option, such as when binding to glass, soft metals, or plastics.

### Method of Identifying New Product

The "8331-14G" product catalog number is being obsoleted.

**Table 1.** Catalog number change

| <i>Obsolete Catalog Number</i> | <i>Replacement Catalog Number</i> |
|--------------------------------|-----------------------------------|
| 8331-14G                       | 8331 <b>D</b> -14G                |
| 8331-50ML                      | 8331 <b>D</b> -120G               |
| 8331-200ML                     | Not available                     |

### Type of Change

|  |  |  |  |
|--|--|--|--|
| <input checked="" type="checkbox"/> Major Change         | <input type="checkbox"/> Minor Change                    |  |  |
| <input checked="" type="checkbox"/> Material Change      | <input checked="" type="checkbox"/> Environmental impact | <input checked="" type="checkbox"/> Hazard | <input type="checkbox"/> Fit (tolerance) |
| <input checked="" type="checkbox"/> Product Obsolescence | <input checked="" type="checkbox"/> Specification Change | <input type="checkbox"/> Function          | <input type="checkbox"/> Format/size     |
| <input type="checkbox"/> Process                         | <input type="checkbox"/> Quality                         | <input type="checkbox"/> Form/Appearance   | <input type="checkbox"/> Other           |

### Product Properties Comparison

| <i>General Properties</i>           | <b>8331D-14G</b><br>(Nearest Version)             | <b>8331-14G</b><br>(Discontinued Version) |
|-------------------------------------|---|---|
| Color                               | Silver Grey                                       | Silver Grey                               |
| Density                             | 2.40 g/mL   | 2.29 g/mL                                 |
| Hardness                            | 78D   | 73D                                       |
| Tensile Strength                    | 13 N/mm <sup>2</sup> [2 400 lb/in <sup>2</sup> ]  | 13 N/mm <sup>2</sup>                      |
| Compressive Strength                | 39 N/mm <sup>2</sup> [11 000 lb/in <sup>2</sup> ] | 39 N/mm <sup>2</sup>                      |
| Resistivity                         | 1.8 x 10 <sup>-3</sup> Ω·cm                       | 7.0 x 10 <sup>-3</sup> Ω·cm               |
| <b>Usage Parameters</b>             |   |   |
| Working Time                        | 20 min  | 10 min                                    |
| Service Temperature Range           | -50–150 °C  | -55–150 °C                                |
| Shelf Life                          | 3 y   | 3 y                                       |
| Storage Temperature Limits          | 16 to 27 °C [61 to 81 °F]                         | 16 to 27 °C [61 to 81 °F]                 |
| Viscosity @25 °C [77 °F] (Part A)   | 130 Pa·s  | 1 000 Pa·s                                |
| Viscosity @25 °C [77 °F] (Part B)   | 130 Pa·s  | 15 000 Pa·s                               |
| Full Cure Time @ Room Temperature   | 6 h   | 24 h                                      |
| <b>Thermal Properties</b>           |   |   |
| Glass Transition Temperature        | 35 °C [133 °F]                                    | 50 °C [124 °F]                            |
| Thermal conductivity @25 °C [77 °F] | 1.5 W/(m·K)                                       | 1.4 W/(m·K)                               |



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### Reason for Change

#### Environmental Impact

The 8331 was reformulated to remove Substances of Very High Concern (SVHC's), specifically the chemical substance 4-nonylphenol, branched (CAS No 84852-15-3). The new 8331D is a safer replacement. The functionality of the epoxy adhesive remains unchanged.

#### Change Schedule

The 8331-14G is being discontinued as stock item.

|  |   |
|--|---|
| <b>Last Manufacture Date</b>             | Made to order for other sizes are available in North America only |
| <b>Last Buy Date</b>                     | Once existing stock is exhausted                                  |
| <b>Proposed Ship Date of replacement</b> | Currently being shipped   |
| <b>Product Qualification Date</b>        | September 30, 2019  |

### Anticipated Impact

The overall impact is anticipated to be positive for both our distributors and our customers.

#### Form

The shape, visual appearance, surface finish and color remain similar between both products. However, the viscosity for the 8331D is much lower for both parts A and B allowing for applications to be managed more easily.

#### Function

The performance characteristics are very similar for both products.

#### Process

The 8331D has improved with longer a working time and a shorter cure time.

#### Quality

The quality and fitness for intended use remains just as high as before.



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### Contact Information

Contact us regarding any additional questions regarding this product change.

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### Approved By

| <i>Name</i>  | <i>Job Title</i> | <i>Date</i>   |
|--------------|------------------|---------------|
| Jason Rogers | Senior VP        | 27 April 2021 |
| Howard Clark | President        | 27 April 2021 |

This report is prepared in compliance with the JEDEC standard JESD46.