

## EPM-2462

### Low volatility electrically conductive silicone elastomer

#### **DESCRIPTION**

- Two-part, tan-colored, electrically conductive silicone
- 20:1 Mix Ratio (Part A: Part B)

#### **APPLICATION**

- For applications requiring low volatility
- Well suited for form-in-place conductive gaskets
- Use as a thermally or electrically conductive interface material

#### **PROPERTIES**

| Tan, paste                              |   |  |
|---|---|--|
| Tan, paste                              |   |  |
| *1                                      | ASTM D2090  | 002  |
| 2.75 hours                              | -   | 008  |
|   |   |  |
| 3.39                                    | ASTM D792   | 003  |
| 85                                      | ASTM D2240  | 006  |
| 525 psi (3.6 MPa)                       | ASTM D412   | 007  |
| 0.005 ohm⋅cm                            | ASTM D257, D4496  | 040  |
| 1.20 W/(mK)                             | ASTM E1530  | 101  |
| (29 x 10 <sup>-4</sup> cal/(cm·sec·°C)) |   |  |
|   |   |  |
| 140 ppm/°C (140 μm/m/°C)                | ASTM D3386  | -  |
| 215 ppm/°C (215 μm/m/°C)                | ASTM D3386  | -  |
| 0.2%                                    | ASTM D2288  | 004  |
| < 5 ppm                                 | -   | -  |
| < 7 ppm                                 | -   | -  |
|   | 2.75 hours  3.39  85  525 psi (3.6 MPa)  0.005 ohm·cm  1.20 W/(mK) (29 x 10 <sup>-4</sup> cal/(cm·sec·°C))  140 ppm/°C (140 μm/m/°C)  215 ppm/°C (215 μm/m/°C)  0.2%  < 5 ppm | 2.75 hours -  3.39 ASTM D792  85 ASTM D2240  525 psi (3.6 MPq) ASTM D412  0.005 ohm·cm ASTM D257, D4496  1.20 W/(mK) ASTM E1530  (29 x 10 <sup>-4</sup> cal/(cm·sec·°C))  140 ppm/°C (140 μm/m/°C) ASTM D3386  215 ppm/°C (215 μm/m/°C) ASTM D3386  0.2% ASTM D2288  < 5 ppm - |

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| Typical Properties | Average Result | Standard | NT-TM |
|--------------------|----------------|----------|-------|
| Ionic Content, Na  | < 5 ppm        | -        | -     |

<sup>\*</sup>Properties tested on a lot-to-lot basis. Do not use the properties shown in this technical profile as a basis for preparing specifications. Please <u>contact</u> NuSil Technology for assistance and recommendations in establishing particular specifications.

#### **INSTRUCTIONS FOR USE**

#### **Mixing**

Thoroughly stir Part A prior to weighing for Part B addition as the product separates. Mix Part A with Part B in a 20:1 ratio just prior to use.

#### **Vacuum Deaeration**

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all safety precautions. Slowly apply full vacuum to a container rated for use and at least four times the volume of material being deaerated. Hold vacuum until bulk deaeration is complete

Note: Some bonding application may require the use of a primer. NuSil Technology's CF1-135 silicone primer is recommended.

#### **Substrate Considerations**

Cures in contact with most materials, exceptions include: sulfurcured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents.

#### **Adjustable Cure Schedule**

Product cures at a wide range of cure times and temperatures to accommodate different production needs. <u>Contact</u> NuSil Technology for details.

#### **OPERATING TEMPERATURE**

The operating temperature range of a silicone in any application is dependent on many variables, including but not limited to: temperature, time of exposure, type of atmosphere, exposure of the material's surface to the atmosphere, and mechanical stress. In addition, a material's physical properties will vary at both the high and low end of the operating temperature range. Silicone typically remains flexible at extremely low temperatures and has been known to perform at -50°C (-58°F) as well as resist breakdown at elevated temperatures up to 250°C (482°F). The user is responsible to verify performance of a material in a specific application.

| Packaging                                   | Warranty  |
|---|-----------|
| 50 Gram Kit<br>100 Gram Kit<br>500 Gram Kit | 12 Months |

#### **ROHS AND REACH COMPLIANCE**

Please <u>contact</u> NuSil Technology's Regulatory Compliance department with any questions or for further assistance

#### **SPECIFICATIONS**

Do not use the properties shown in this technical profile as a basis for preparing specifications. Please <u>contact</u> NuSil Technology for assistance and recommendations in establishing particular specifications.

#### WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC (hereinafter "NuSil Technology") is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides a specific written warranty of fitness for a particular use, NuSil Technology's sole warranty is that the product will meet NuSil Technology's then current specification. NuSil Technology specifically disclaims all other expressed or implied warranties, including, but not limited to, warranties of merchantability and fitness for use. The exclusive remedy and NuSil Technology's sole liability for breach of warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. NuSil Technology expressly disclaims any liability for incidental or consequential damages.



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NuSil Technology believes, to the best of its knowledge, that the information and data contained herein are accurate and reliable. The user is responsible to determine the material's suitability and safety of use. NuSil Technology cannot know each application's specific requirements and hereby notifies the user that it has not tested or determined this material's suitability or safety for use in any application. The user is responsible to adequately test and determine the safety and suitability for their application and NuSil Technology makes no warranty concerning fitness for any use or purpose. NuSil Technology has completed no testing to establish safety of use in any medical application.

NuSil Technology has tested this material only to determine if the product meets the applicable specifications. (Please contact NuSil Technology for assistance and recommendations when establishing specifications.) When considering the use of NuSil Technology products in a particular application, review the latest Material Safety Data Sheet and contact NuSil Technology with any questions about product safety information.

Do not use any chemical in a food, drug, cosmetic, or medical application or process until having determined the safety and legality of the use. The user is responsible to meet the requirements of the U.S. Food and Drug Administration (FDA) and any other regulatory agencies. Before handling any other materials mentioned in the text, the user is advised to obtain available product safety information and take the necessary steps to ensure safety of use.

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# Silicone Sales & Services UK - Ireland - Benelux

© 2020 - Polymer Systems Technology Limited™ Unit 2. Network 4. Cressex Business Park, Lincoln Road, High Wycombe, Bucks. HP12 3RF

tel: +44 (0) 1494 446610

web: https://www.silicone-polymers.com

email: sales@silicone-polymers.co.uk

