

R-1140

Clear Silicone Adhesive

Product Profile

Description

- One-part, translucent, non-slumping silicone adhesive
- Supplied ready to use in Semco[®] cartridges

Applications

- Bonds aggressively to most surfaces including: glass, ceramics, most metals, natural and synthetic fibers, wood, painted surfaces, many plastics and other silicone rubbers
- For applications requiring a operating temperature range of -65 to 240°C (-85 to 465°F)

| Typical Properties | Result | Metric Conv. | ASTM | NT-TM |
|---------------------------------------|--------------|--------------|------------|-------|
| Uncured: | | | | |
| Appearance | Translucent | - | D2090 | 002 |
| Consistency | Thixotropic | - | - | - |
| Non-Volatile Content | 100% | - | D2288 | 004 |
| Cure Time | | | | |
| Set Up (Thin Section) | 50 min | - | - | - |
| Full cure | 7 days | - | - | 075 |
| Tack Free Time | | | | |
| @ 25°C (77°F) and 50% R.H. | 8 min | - | C-679-87 | 005 |
| Cured: 7 days, 50% R.H. | | | | |
| Operating Temperature Range | -85 to 465°F | -65 to 240°C | - | - |
| Specific Gravity | 1.08 | - | D792 | 003 |
| Durometer, Type A | 30 | - | D2240 | 006 |
| Tensile Strength | 600 psi | 4.2 Mpa | D412, D882 | 007 |
| Elongation | 350% | - | D412, D882 | 007 |
| Lap Shear Strength (primed w/ SP-120) | 625 psi | 4.3 Mpa | D1002 | 010 |
| Tear Strength | 40 ppi | 7.0kN/m | D624 | 009 |
| Young's Modulus | 300 psi | 2.1 Mpa | - | - |

Cure Time

Cure time required for R-1140 depends on humidity and thickness of the material being bonded. Accomplish cure by exposure to atmospheric moisture. Cure may take longer in dry air but will occur at any level above 20% relative humidity. Cure will continue for several days until acetic acid odor has disappeared. Vulcanization and cure are not significantly improved by heating.

Warnings About Product Safety

NuSil Technology believes that the information and data contained herein are accurate and reliable. However, 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.

Packaging

3 oz Tube (89 mL)
 6 oz Tube (177 mL)
 Case (24 x 6 oz)

Warranty

6 Months

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 Sheets 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, obtain available product safety information and take the necessary steps to ensure safety of use.

Specifications

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

Patent Warning

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Warranty Information

NuSil Technology's warranty period is 6 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 any other expressed or implied warranty, including 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.