

R33-2186-1

Fast-cure white silicone adhesive

DESCRIPTION

- Two-part, white, thixotropic, high tear strength silicone system
- Cures at room temperature or rapidly with the application of heat in an oven, or by a heat gun or lamp
- Primer is not required for many bonding applications
- Does not require atmospheric moisture to cure
- No curing byproducts such as acetic acid or methyl alcohol
- Consistency allows products to be supplied in easy-to-use, airless side-by-side kits that eliminate mixing and deairing difficulties
- 1:1 Mix Ratio (Part A: Part B)

APPLICATION

- For bonding and sealing silicones to each other and other substrates such as metals and plastics
- Suitable for fast-paced production or prototyping due to its rapid cure rate

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	White	ASTM D2090	002
Viscosity, Part A	80,000 cP (80,000 mPas)	ASTM D1084, D2196	001
Work Time	2 hours	-	008
Cured: 24 hours minimum at ambient temperature and humidity			
Specific Gravity	1.12	ASTM D792	003
Durometer, Type A	20	ASTM D2240	006
Tensile Strength	1,000 psi (6.9 MPa)	ASTM D412	007
Elongation	740%	ASTM D412	007

Tear Strength	110 ppi (19.3 kN/m)	ASTM D624	009
---------------	---------------------	-----------	-----

The test data shown for this material is the average value for typical properties. All of these properties may not be tested on a lot to lot basis and cannot be used to draft specifications. Please [contact](#) NuSil® for assistance and recommendations in establishing limits for product specifications.

INSTRUCTIONS FOR USE

Mixing

Mix at a 1:1 mix ratio when extracted from side-by-side kits through a static mix and dispense cartridge. Attach the disposable static mix tip to the cartridge and extrude the product directly onto the substrate.

Note: NuSil recommends discarding the first few grams of extruded material.

R33-2186-1 can also be purchased in standard two-part kits. When using standard kits, take care to minimize air entrapped while mixing. Place the mixed product in a vacuum chamber to remove entrapped air and subsequently reduce bubble formation during curing.

Substrate Considerations

Cures in contact with most materials common to electrical and electronic assemblies. Exceptions include: sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents. Clean units being encapsulated or potted to ensure they are free of surface contaminants. Also clean and dry containers and dispensers prior to use. Prevent cure inhibition by washing all containers with clean solvent or volatilizing the contaminants by heating.

Adjustable Cure Schedule

Product cures at room temperature and a wide range of elevated temperatures and cure times to accommodate different production needs. [Contact](#) NuSil 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

200 ml SxS Kit (0.21 kg)
 400 ml SxS Kit (0.42 kg)
 2 Pint Kit (0.91 kg)
 2 Gallon Kit (7.28 kg)
 10 Gallon Kit (36.4 kg)

Warranty

12 Months

ROHS AND REACH COMPLIANCE

Please [contact](#) NuSil's Regulatory Compliance department with any questions or for further assistance.

SPECIFICATIONS

Do not use the typical properties shown in this technical profile as a basis for preparing specifications. Please [contact](#) NuSil for assistance and recommendations in establishing limits for product specifications.

WARRANTY INFORMATION

The warranty period provided by NuSil Technology LLC is 12 months from the date of shipment when stored below 40°C in original unopened containers. Unless NuSil provides a specific written warranty of fitness for a particular use, NuSil's sole warranty is that the product will meet NuSil's then current specification. NuSil 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'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 expressly disclaims any liability for incidental or consequential damages.

WARNINGS ABOUT PRODUCT SAFETY

NuSil 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 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 makes no warranty concerning fitness for any use or purpose. NuSil has completed no testing to establish safety of use in any medical application.

NuSil 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 products in a particular application, review the latest Material Safety Data Sheet and [contact](#) NuSil 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.

PATENT / INTELLECTUAL PROPERTY WARNING

NuSil disclaims any expressed or implied warranty against the infringement of any domestic or international patent/intellectual property right. NuSil does not warrant the use or sale of the products described herein will not infringe the claims of any domestic or international patent/intellectual property right covering the product itself, its use in combination with other products, or its use in the operation of any process.