

MED4-4220

Potting and Encapsulating Silicone Elastomer

Product Profile

Description

- A two-part, low viscosity, translucent silicone system
- 1:1 Mix Ratio (Part A:B)

Applications

- For potting, encapsulating, and replicating surfaces and devices
- For providing protection of electronic components and assemblies against shock vibration, moisture, ozone, dust and other contaminants

NuSil Technology's MED4-4220 is a restricted product. It shall not be considered for use in human implantation for a period of greater than 29 days.

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance	Translucent	-	D2090	002
Viscosity, Part A	20,000 cP	20,000 mPas	D1084, D2196	001
Viscosity, Part B	15,000 cP	15,000 mPas	D1084, D2196	001
Work Time	25 min	-	-	008
Cured: 15 minutes @ 150°C (302°F)				
Durometer, Type A	17	-	D2240	006
Tensile Strength	675 psi	4.7 MPa	D412, D882	007
Elongation	575%	-	D412, D882	007
Tear Strength	30 ppi	5.3 kN/m	D624	009
Operating Temperature Range	-85 to 465°F	-65 to 240°C	-	-

Instructions for Use

Mixing

Mix in a 1:1 ratio Part A to part B. Take care to minimize air entrapment during mixing.

Substrate Consideration

MED4-4220 will cure in contact with most materials common to biomedical assemblies. Exceptions include sulfur-cured organic rubbers, latex, chlorinated rubbers, some RTV silicones and unreacted residues of some curing agents. Units being encapsulated or potted should be clean and free of surface contaminants. Containers and dispensers being used with MED4-4220 should also be clean and dry.

Note: Some bonding applications may require the use of a primer. NuSil Technology MED1-161 silicone primer is recommended.

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 Technology for details.

FDA Master Access File

A Master Access File for MED4-4220 has been filed with the U.S. Food and Drug Administration. Customers interested in authorization to reference the Master Access File must contact NuSil Technology.

Packaging

50 ml SxS Kit
 2 Pint Kit (91 g)
 2 Gal Kit (7.28 kg)

Warranty

12 Months

Warnings About Product Safety

NuSil Technology believes the information and the 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.

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, 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 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 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.