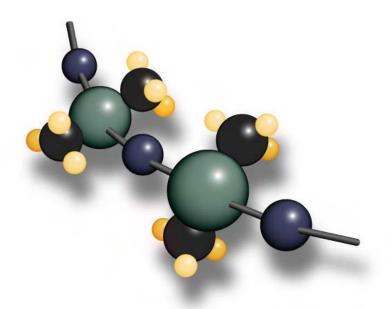
# Polymer Systems Technology Limited

# **UK & Ireland Distributor**



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Creative Partners in a Material World

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An ISO 9001 Certified Company

# **MED-4210**

Silicone Elastomer

# Product Profile

### **Description**

- Two-part, translucent, pourable silicone elastomer
- Cures at room temperature and rapidly with heat
- Offers high tear strength and excellent physical properties
- 10:1 Mix Ratio (Part A: B)

## **Applications**

 As an adhesive, encapsulating compound or mold-making material

NuSil Technology's MED-4210 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	-	D9020	002
Viscosity, Part A	83,000 cP	83,000 mPas	D1084, D2196	001
Tack-Free Time	19 hours	· -	C679	005
Work Time	2.5 hours	-	-	008
Cured: 15 minutes @ 150°C (302°C)			-	
Specific Gravity	1.12	-	D792	003
Durometer, Type A	30	-	D2240	006
Tensile Strength	1,050 psi	7.2 MPa	D412	007
Elongation	450%	-	D412	007
Tear Strength	100 ppi	17.6 kN/m	D624	009

#### Instructions for Use

#### Mixing

Mix Parts A and B in a 10:1 ratio by weight. Take care to minimize air entrapment during mixing.

#### Vacuum Deaeration

Remove air entrapped during mixing by common vacuum deaeration procedure, observing all applicable 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.

#### **Substrate Considerations**

MED-4210 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 contaminates. Containers and dispensers being used with MED-4210 should also be clean and dry. Cure inhibition can usually be prevented by washing all containers with clean solvent or volatilizing the contaminants by heating.

# **Packaging**

37 ml SxS Kit 250 ml SxS Kit 1 Pint Kit (505 g) 1 Gallon Kit (4.04 kg) 5 Gallon Kit (20.2 kg) Drum Kit (198.5 kg)

#### Warranty

12 Months

**Note:** Some bonding application 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. Some cure schedules\* include:

65°C (149°F) 100°C (212°F) 2 minutes

#### Caution

During vulcanization, oven-curing, and post-curing, vapors containing polychlorinated biphenyl (PCB) and other residual volatile byproducts of vulcanization may be released in small amounts, which may be harmful. Work areas must be well ventilated, and workers should avoid inhalation of vapors. Review the Material Safety Data Sheet for specific information.

#### **FDA Master Access File**

A Master Access File for MED-4210 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.

# 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**

NuSil Technology disclaims any expressed or implied warranty against the infringement of any patent. NuSil Technology does not warrant the use or sale of the products described herein will not infringe the claims of any United States' or other country's patents covering the product itself, its use in combination with other products or its use in the operation of any process.

# **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.

<sup>\*</sup> Cure time defined as the time required for a knife coat layer ~0.02" to be removed from a release liner