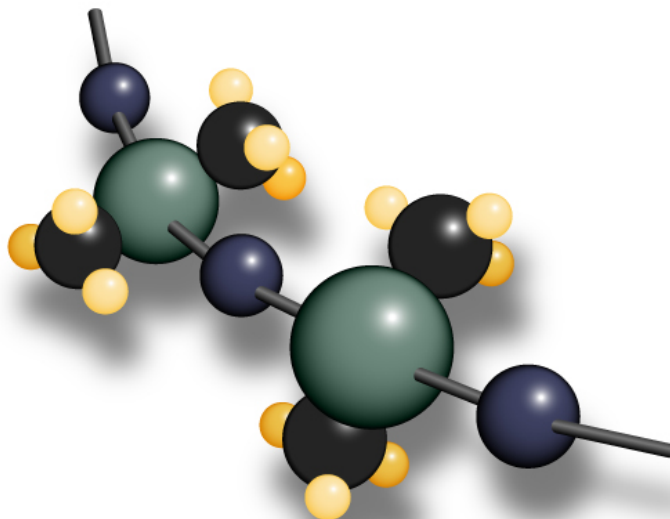


Polymer Systems Technology Limited

UK & Ireland Distributor



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R-2186-2

General Purpose, Black Silicone Elastomer

Product Profile

Description

- Two-part, black, non-corrosive, pourable silicone system
- 10:1 Mix Ratio (Part A:B)
- Cures at room temperature or rapidly with heat
- High tear strength and good physical properties

Applications

- To provide protection against shock, vibration, moisture, ozone, dust, chemicals and other environmental hazards
- For encapsulating electronic components and assemblies
- Ideal for molding or use in O-rings, potting connectors, cable harness breakouts, molded high voltage terminals, seals and gaskets due to its high physical strength

Typical Properties	Result	Metric Conv.	ASTM	NT-TM
Uncured:				
Appearance	Black Part A / Translucent Part B	-	D2090	002
Work Time	3 hours	-	-	008
Cured : 15 min @ 150°C (302°F)				
Operating Temperature Range	-85 to 465°F	-65 to 240°C	-	-
Specific Gravity	1.15	-	D792	003
Durometer, Type A	35	-	D2240	006
Tensile Strength	1050 psi	7.2 MPa	D412, D882	007
Elongation	500 %	-	D412, D882	007
Tear Strength	100 ppi	17.6 kN/m	D624	009
Lap Shear Strength (primed w/ SP-270)	535 psi	3.7 MPa	D1002	010
Dielectric Strength	500 volts/mil	19.7 kV/mm	D149	-
Volume Resistivity	1 x 10 ¹⁵	-	D257	040

Instructions for Use

Mixing

Mix in a 10:1 ratio Part A to Part B 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 vacuum, up to 28 inches Hg, to a container rated for use and of volume at least four times that of material being deaerated. Hold vacuum until presence of air is no longer evident.

Substrate Consideration

Cures in contact with most materials common to electronic assemblies. Exceptions include butyl and 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 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.

Note: Some bonding applications may require the use of a primer. NuSil Technology SP-270 silicone primer is recommended.

Adjustable Cure Schedule

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)

Warranty

6 Months

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.

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.

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.