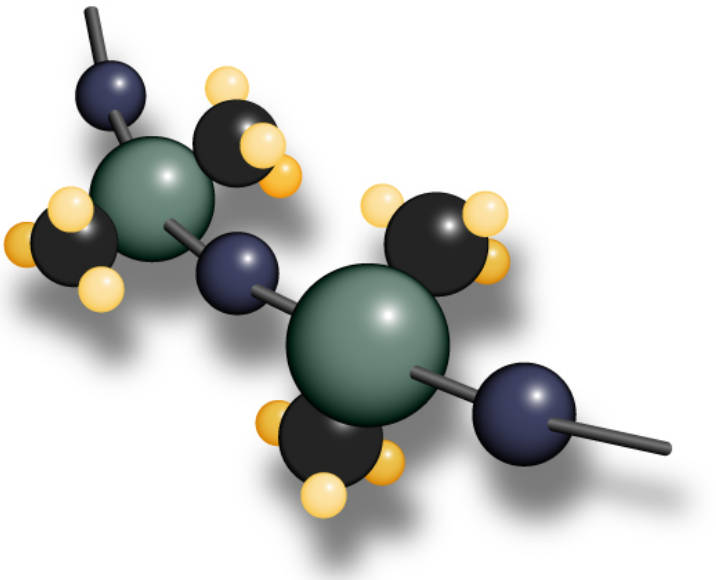
Polymer Systems Technology Limited

UK & Ireland Distributor

NuSil SILICONE TECHNOLOGY®
Creative Partners in a Material World

Unit 2. Network 4. Cressex Business Park,
Lincoln Road, High Wycombe, Bucks. HP12 3RF
Phone +44 (0) 1494 446610
Fax: +44 (0) 1494 528611
Web: http://www.siliconepolymers.co.uk
Email: sales@silicone-polymers.co.uk



NuSil SILICONE TECHNOLOGY
Creative Partners in a Material World

NuSil Technology
1050 Cindy Lane • Carpinteria, CA 93013
805/684-8780 • 805/566-9905 Fax
www.nusil.com

An ISO 9001 Certified Company

Product Profile

MED-4840
Liquid Silicone Rubber

Description:

NuSil Technology MED-4840 is a two-part system designed for liquid injection molding. When A and B components are mixed together in equal portions, the liquid will cure to a tough, rubbery elastomer via addition-cure chemistry.

The benefits of this material include:

- Rapid Cure
- Post-cure not required
- Less yellowing with aging
- Increased efficiency over transfer molding

The liquid system permits high quality parts to be molded at rapid rates.

Applications:

NuSil Technology MED-4840 is especially designed for manufacturing by either liquid injection molding or liquid extrusion. Some specific applications include:

- Precision molded parts
- Molded rubber stoppers
- Encapsulated electronic parts
- O-rings

The purchaser should thoroughly test products made in part or otherwise incorporating NuSil Technology MED-4840 A/B Liquid Silicone Rubber to determine the acceptability of the product's performance in a specific application.

Instructions For Use:

Blending

MED-4840 is supplied as A and B components which must be combined in equal portions prior to use.

Airless mixing, metering and dispensing equipment is recommended for production operations. Care must be taken to work in a meticulously clean area with no organic rubbers used on the same equipment, as traces of foreign materials can poison the catalyst, inhibiting the cure.

Vulcanization

Cure is initiated by the application of heat. Raising the temperature of the mass to 150°C (302°F) results in essentially instantaneous cure to a tough elastomeric material. The pre-measured catalyst gives the stock a fixed cure rate which can be measured on a Monsanto Rheometer. Do not attempt to change molding times by mixing the two components in anything other than a 1:1 ratio, as this will change the properties of the rubber. The rate of cure may be varied by adjusting temperature.

CAUTION: The cure may be inhibited by traces of amines, sulfur, nitrogen oxide, organotin compounds and carbon monoxide. Because organic rubbers often contain these substances, they should not come in contact with the uncured elastomer. Catalyst residues from silicone RTV elastomers and peroxide-cured silicone elastomers may also inhibit cure.

Typical Properties as Supplied:

Extrusion Rate, gpm	120
Specific Gravity	1.12
Durometer Hardness, Type A	40
Tensile Strength, psi / MPa	1200 / 8.3
Elongation, percent	425
Tear Strength, die B, ppi / kN/m	150 / 26.3
Tissue Culture	No CPE
Metals, ppm - Al	100 Max
P	50 Max
Fe, Sb, Ge, Mg, Mn, Mo, Pb, Sn, Cr, Bi, Ti, Be, Ca, Ni, Ag, Co, Cu, Zr, Ba, As, Na, V	10 ea. Max
Stress @ 200%, psi / MPa	370 / 2.6

Test Methods:

	ASTM	NTM
Specific Gravity	D792	003
Durometer	D2240	006
Tensile Strength, psi	D412	007
Elongation, percent	D412	007
Tear Strength, die B, ppi	D624	009
Stress @ 200%, psi	D412	007

FDA Master File:

A Master File for MED-4840 will be filed with the U.S. Food and Drug Administration. The Master File will contain the results of applicable chemical and mechanical equivalency tested as well as confirmatory biological testing. Customers interested in authorization to reference these files must contact NuSil Technology.

Packaging:

Slab
Fifty ML Side by Side Kit
Two Hundred ML Side by Side Kit
Four Hundred ML Side by Side Kit
Two Pint Kit
Two Gallon Kit (Plastic)
Two Gallon Kit (Metal)
Ten Gallon Kit
Two Drum Kit

NuSil Technology believes that the information and data contained herein is accurate and reliable; however, it is the user's responsibility to determine suitability and safety of use for these materials. NuSil Technology can not know the specific requirements of each application and hereby makes the user aware that is has not tested or determined that these materials are suitable or safe for any application. It is the user's responsibility 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. There has been no testing done by NuSil Technology 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, you should review the latest Material Safety Data Sheets and contact NuSil Technology for any questions about product safety information you may have.

No chemical should be used in a food, drug, cosmetic, or medical application or process until you have determined the safety and legality of the use. It is the responsibility of the user 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, you should obtain available product safety information and take the necessary steps to ensure safety of use.

Specifications:

The typical properties shown in this technical profile should not be used 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 that the use or sale of the products described herein will not infringe the claims of any United States patents or other country's patents covering the product itself or the use in combination with other products or in the operation of any process.

Warranty Information:

NuSil Technology's warranty period is 6 months from date of shipment when stored below 40°C in original unopened containers. Unless NuSil Technology provides you with 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 express or implied warranty, including warranties of merchantability and of fitness for use. Your 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, and NuSil Technology expressly disclaims any liability for incidental or consequential damages.