

MED-460

Silicone fluid

DESCRIPTION

- A clear copolymer liquid consisting of dimethylsiloxane and trifluoropropylmethylsiloxane that provides a lubricious and/or hydrophobic coating
- Available in standard viscosities of 350, 1,000 and 12,500 cP
- Custom viscosities available upon request

APPLICATION

- Reduces friction between moving or sliding device components or against human tissue
- Used to lubricate the surfaces of molded dimethyl silicone elastomer parts
- For applications requiring a material that is highly water repellent and resists decomposition from heat and oxidation

NuSil® MED-460 may be considered for use in human implantation for a period of greater than 29 days

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	Translucent	ASTM D2090	002
Volatiles Content			
(350 cP)	<0.2%	ASTM D2288	004
(1,000 cP)	<0.1%		
(12,500 cP)	<0.1%		
Refractive Index	1.38	ASTM D1218, D1747	018
Specific Gravity, Hydrometer	1.20 – 1.23	ASTM D1298	097
Tissue Culture (Cytotoxicity Testing)	Pass	USP <87> ISO 10993-5	061

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

Application

Apply directly to surfaces by dipping, spraying, brushing, or wiping. When a very thin film is desired, dilute to 1-5% weight silicone solids in a compatible solvent. Apply this solution to a surface using the above techniques. After applying, allow sufficient time for the solvent to evaporate.

Although MED-460 fluid possesses excellent lubricative characteristics, it may not provide satisfactory lubrication in load-bearing situations, especially those involving metal-to-metal contact.

Thin films of MED-460 fluid on plastics, metal and glass provide a temporary, water-repellent barrier. On materials resistant to thermal distortion, such as glass, ceramics, and metals, this fluid film can be converted to a highly durable hydrophobic film by heating the treated surface. Heating 2 hours at 250°C (482°F), 1 hour at 276°C (536°F) or 30 minutes at 300°C (572°F) is satisfactory.

FDA MASTER FILE

A Master File for MED-460 has been filed with the U.S. Food and Drug Administration. Customers interested in authorization to reference the Master File must [contact](#) NuSil.

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 36 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

Packaging

2 Ounce (0.057 kg)
1 Pint (0.455 kg)
1 Gallon (3.64 kg)
5 Gallon (18.2 kg)

Warranty

36 Months

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 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

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covering the product itself, its use in combination with other products, or its use in the operation of any process.