

# MED-400

# Silicone fluid

# **DESCRIPTION**

- A clear trifluoroprophylmethylsiloxane liquid 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-400 may be considered for use in human implantation for a period of greater than 29 days.

# **PROPERTIES**

| Typical Properties           | Average Result | Standard          | NT-TM |
|------------------------------|----------------|-------------------|-------|
| Jncured:                     |                |                   |       |
| Appearance                   |                |                   |       |
| (350 cP)                     | Transparent    | ASTM D2090        | 002   |
| (1,000 cP)                   | Transparent    |                   |       |
| (12,500 cP)                  | Transparent    |                   |       |
| Volatile Content             |                |                   |       |
| (350 cP)                     | 0.3%           | ASTM D2288        | 004   |
| (1,000 cP)                   | 0.2%           |                   |       |
| (12,500 cP)                  | 0.1%           |                   |       |
| Refractive Index             | 1.38           | ASTM D1218, D1747 | 018   |
| Specific Gravity, Hydrometer |                |                   |       |
| (350 cP)                     | 1.25           | ASTM D1298        | 097   |
| (1,000 cP)                   | 1.27           |                   |       |
| (12,500 cP)                  | 1.30           |                   |       |



| Typical Properties                    | Average Result | Standard    | NT-TM |
|---------------------------------------|----------------|-------------|-------|
| Tissue Culture (Cytotoxicity Testing) | Pass           | USP <87>    | 061   |
|                                       |                | ISO 10993-5 |       |

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 NuSiI 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-400 fluid possesses excellent lubricative characteristics, it may not provide satisfactory lubrication in load-bearing situations, especially those involving metal-to-metal contact.

Packaging Warranty
2 Ounce (0.057 kg) 36 Months

1 Pint (0.455 kg) 1 Gallon (3.64 kg) 5 Gallon (18.2 kg)

Thin films of MED-400 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-400 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 <u>contact</u> 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 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 <u>contact</u> 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 <u>contact</u> 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

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