

LS-1246

Thixotropic optical silicone grease

DESCRIPTION

- Non-curing, 1.46 RI Grease
- Container options are available for use with automated dispensing equipment

APPLICATION

- A thixotropic, one-part, optical grease
- Coupling of silica telecom fiber splices, polymer waveguide/backplane connections, Vertical-Cavity Surface-Emitting Laser (VCSEL) coupling to fiber and a variety of other optics applications
- Flows under pressure but non-slumping at rest
- 1.46 refractive index for matching silica

PROPERTIES

Typical Properties	Average Result	Standard	NT-TM
Uncured:			
Appearance	Transparent	ASTM D2090	002
Cone Penetration	26 mm	ASTM D217	021
Specific Gravity, Pycnometer	1.10	ASTM D891, D1475	022
Refractive Index, 589 nm	1.46	ASTM D1218, D1747	018

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

Optical Material Compatibility and Design Considerations

LS-1246 is inert and compatible with most optical plastics, glasses, and semiconductors. For custom values of refractive index, or other technical issues, [contact](#) NuSil.

Substrate Considerations

Substrates should be free of dust, oil and fingerprint soils. Clean substrates using suitable industrial techniques for cleaning electro-optics. If cleaning with a hydrocarbon solvent, a final rinse with reagent grade isopropanol is recommended. If cleaning with an aqueous detergent, multiple final rinses with deionized water or a single rinse with reagent grade isopropanol is recommended.

Clean-Up

Remove from surfaces by first wiping off excess gel with a suitable, dry, lint-free wipe and then by wiping down the surface with a lint-free wipe soaked with acetone. If the surface material is incompatible with acetone, use isopropanol. Complete the clean-up process with a final rinse with reagent grade isopropanol if removal of acetone residues is necessary. The user is responsible for compliance with all applicable regulations governing disposal of waste materials as indicated in the MSDS.

OPERATING TEMPERATURE

The operating temperature range of a silicone in any application is dependent on many variables, including but not limited to: temperature, time of exposure, type of atmosphere, exposure of the material's surface to the atmosphere, and mechanical stress. In addition, a material's physical properties will vary at both the high and low end of the operating temperature range. This type of silicone typically remains flexible at extremely low temperatures and has been known to perform at -50°C (-58°F) as well as resist breakdown at elevated temperatures up to 200°C (392°F). The user is responsible to verify optical and mechanical performance of a material in a specific application.

ROHS AND REACH COMPLIANCE

Please [contact](#) NuSil's Regulatory Compliance department with any questions or for further assistance

Packaging

30 ml Syringe (0.03 kg)
6 Ounce (0.168 kg)

Warranty

12 Months

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 12 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 [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

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