

Electrolube® LGF400

Thermally Conductive Liquid Gap Filler

DESCRIPTION

Electrolube® LGF400 is a two-component cure-in-place, silicone-based liquid gap filler with a bulk thermal conductivity of 4 W/m-K. The shear-thinning behavior of the material makes LGF400 highly suitable for automated dispensing. Once dispensed, the material does not slump and exhibits good adhesion to the surface, simplifying processing. Prior to cure, LGF400 is highly conformable, which makes it an ideal solution for filling air gaps and ensuring excellent wet-out. Curing can occur at room temperature or be accelerated with heat, resulting in a soft, fully cured elastomer that remains in place and will not pump out from the interface.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- Thermal conductivity of 4 W/m-K, aids rapid heat transfer over uneven surfaces
- Cures at room temperature
- Soft cured hardness of 65 Shore 00
- No risk of interface pump-out
- Excellent at absorbing mechanical tolerance without added stress

APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes

PRODUCT INFORMATION

Standard packaging sizes

Dual Cartridge:	50, 200 and 400 mL
Cartridge kit:	1200 mL (2 x 600 mL)
Pail kit:	16 liters (2 x 8 liters)

TYPICAL PROPERTIES

Category	Result	Unit	Test Method
Material Properties			
Color Part A	White	-	Visual
Color Part B	Blue	-	Visual
Mixed Color	Blue	-	Visual
Resin Base	Silicone	-	-
Mixed Viscosity @ 20 rpm	60	Pa-s	Spiral Viscometer
Density	3.0	g/ml	ASTM D1475
Cured Hardness	65	Shore 00	ASTM D2240
Siloxane Content	<100	ppm	-
Operating Temperature Range	-50 to +200	°C	-
Flammability	Meets V-0		UL94
Electrical Properties			
Dielectric Strength	>10	kV/mm	ASTM D149
Thermal Properties			
Thermal Conductivity	4.0	W/m-K	ASTM D5470
Cure Properties			
Mix Ratio	1:1		
Full cure at 25 °C ¹	24	Hours	ASTM D2240
Full cure at 100 °C	30	Minutes	ASTM D2240
Pot life ²	60	Minutes	

¹ Dry to the touch after 5 hours

² Time for viscosity to double

APPLICATION GUIDELINES

Ensure surfaces are clean, dry, and free from grease and dust before use. Certain materials, such as curing agents and plasticizers, can inhibit curing of silicone compounds. These chemicals include:

- Organotin and other organometallic compounds.
- Silicone rubber containing organotin catalysts.
- Sulphur and other sulphur-containing materials, amines, urethanes, or amine-containing materials.
- Unsaturated hydrocarbon plasticizers.

ADDITIONAL INFORMATION

Cleaning: LGF400 can be removed using an approved solvent, such as IPA

Storage: Keep lids tightly sealed and store under ambient conditions.

Shelf Life: 9 months

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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