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TECHNICAL DATA SHEET

Silmer® G-115
Silicone Gel

DESCRIPTION

Silmer® G-115 is a two-part optically clear, addition cured silicone gel systems with good chemical resistance, electrical resistance, a large range of temperature usage and various mechanical properties. **Silmer G-115** was developed to minimize damage from monomers when used as a VAT plate for SLA type 3D printers extending the life of the plate.

TYPICAL PROPERTIES (as received)

Appearance		Clear Liquid
Viscosity, cPs	Part A	4800
	Part B	5000
Work Time (estimated), min		300
Cure Time, min		420

TYPICAL PROPERTIES (after curing)

Gel Appearance	Hard Gel
Hardness, Shore A	17
Shear Modulus, Pa	1.5×10^5
Tan δ after cured	0.068
Transition Peak, tan δ /temp °C	34/75.8
Elongation, qualitative	Low
Tack, gm	Nil
Operating Temperature, °C	-100 to 250
Dielectric Constant, 100-100KHz	Estimated 2.8
Dissipation Factor, 100/100KHz	0.002/ 0.0001
Volume Resistivity, Ohm-cm	1×10^{15}
Dielectric Strength, V/mil	>400

APPLICATION & USES

Silmer G silicone gels can provide protection of electric and electronic components and assemblies against moisture, dust, chemicals and other environmental exposures. Can also be used as:

- VAT plate for SLA type 3D printers.
- Potting compound to keep dirt and corrosion out of critical areas.
- Sealant or encapsulant where periodic reentry for inspections or repair is required.
- Reinforcing gel to minimize fatigue on conductors due to vibration.
- Conformal cushion to protect sensitive components from corrosion and vibration.
- Gasket in low pressure applications for sealing.
- Insulator on low and medium voltage applications.

Silmer G-115 was developed as a bottom plate for the vat in SLA 3D printers. The unique formulation minimizes swelling and clouding from monomers extending the life of the plate.

MIXING INSTRUCTIONS

Mix Part A and Part B in a 1:1 ratio by weight. Inaccurate proportioning or inadequate mixing may cause localized problems affecting cured properties.

CURE CONSIDERATIONS

A wide range of cure times, working time and temperatures are available in similar products. Cure inhibition can be minimized by using clean containers and dispensers. All substrates and dispensers must be free of contaminants. A primer might be required for some substrates.

SHELF LIFE

When stored at or below 25°C, **Silmer G-115** has a shelf life of 24 months from the date of manufacture.

PACKAGING

Silmer G-115 is available in 20kg and 200kg containers.

LEGAL DISCLAIMER

Siltech Corporation believes that the information in this technical data sheet is an accurate description of the typical uses of the product. Siltech Corporation, however, disclaims any liability for incidental or consequential damages, which may result from the use of the product that are beyond its control. Therefore, it is the user's responsibility to thoroughly test the product in their particular application to determine its performance, efficacy and safety. Nothing contained herein is to be considered as permission or a recommendation to infringe any patent or any other intellectual property right.

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