

Gap Filler SL6300

Two-component, High Thermal Conductivity, Low Volatility

PRODUCT DESCRIPTION

Plexus® Gap Filler SL6300 is a two-component, fast curing, gel type gasket filler, with a thermal conductivity of 3.0 W/m·K. It is suitable for thixotropic and low stress applications, designed to provide enhanced thermal management for advanced vehicles battery, automotive electronics and communications equipment etc. It provides better reliability and rework ability than traditional materials. This product is high adaptable to materials, easy to use, which can eliminate assembly tolerances and protect welding spot and other components for stress-free on assembly line. This product can be applied in automation control supply and fully automatic assembly, which corresponds to the thermal interface of Industry 4.0. It can significantly reduce the overall manufacturing cost for its good rework ability and repairability.

PRODUCT CHARACTERISTICS

Chemical Class	Silicone
Appearance(mixed)	Light Blue
Flammability, UL94 V-0	Pass
Solids by Volume, %	100
Volatility	Low

TYPICAL PROPERTIES OF UNCURED MATERIALS

Part A

Appearance	Blue
Specific gravity @25 °C	2.75
Viscosity @25 °C, cps	250,000

Part B

Appearance	White
Specific gravity @25 °C	2.75
Viscosity @25 °C, cps	260,000

Mixed

Mix Ratio, by vol, A to B	1:1
Mix Ratio, by wt, A to B	1:1
Working time @ 25°C, mins	60
Cure time @25 °C, hrs	24

TYPICAL PROPERTIES OF CURED MATERIALS

Fully Cured Product (7 days at 25 °C)

Density(cured), g/cm ³	2.75
Hardness, ASTM D2240,	
Shore OO	60
Coefficient of thermal conductivity, ISO22007-2 (Hotdisk), W/(m·K)	3.0
Volume resistivity, ASTM D257, Ω *cm	1*10 ¹³
Dielectric strength, ASTM D149, kV/mm	≥10
Service temperature, °C	-40~180

PROCESSING

1. The surfaces must be dry, no grease and dust. The treatment should be selected according to the substrate kinds.
2. Weigh Part A & Part B exactly according to the mix ratio and then mix thoroughly until the color is uniform (Different color of Part A & Part B is designed to judge easily).
3. Apply mixed adhesive directly to the surface, then assemble with mating part within recommended working time (30-60 minutes). Apply stable pressure between mating parts to ensure good contact, and then cure the sample as cure condition describes.

WARRANTY

ITW will replace any material found to be defective. Because the storage, handling and application of this material are beyond our control, we can accept no liability for the results obtained.

PRECAUTIONS

Please refer to the appropriate material safety data sheet (MSDS) prior to using this product.

STORAGE

Store the unopened product in a cool, dry, well ventilated location away from sources of heat. Optimal storage temperatures should range between **10 °C and 30 °C**. Product removed from the containers during use should not be returned to original containers in order to avoid potential contamination.

CONVERSIONS

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

NOTE

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For technical assistance, please call: 86-021-54265119

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