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# **BERGQUIST® GAP FILLER TGF 2200 APS**

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#### **Product description**

A thermally conductive, liquid gap filler material.

Technology	Silicone
Appearance - Part A	Pink
Appearance - Part B	Grey
Appearance (cured)	Pink
Cure	Room temperature cure or Heat cure
Application	Thermal management TIM (Thermal interface material)
Mix ratio by weight, Part A : Part B	1:1
Mix ratio by volume, Part A : Part B	1:1
Operating temperature, °C	-40 to 100°C

#### Features and benefits

- Thermal conductivity 2.2 W/m-K
- Low density 2.06 g/cm<sup>3</sup>
- · Low volatility for outgassing sensitive
- Optimized shear thinning characteristics for ease of dispensing
- Excellent low and high temperature mechanical and chemical stability

BERGQUIST<sup>®</sup> GAP FILLER TGF 2200 APS is a two-part, high performance, thermally conductive, liquid gap filling material. This material offers infinite thickness variations with little or no stress to the sensitive components during or following assembly. As cured BERGQUIST<sup>®</sup> GAP FILLER TGF 2200 APS provides a soft, thermally conductive, form-in place elastomer that is ideal for fragile assemblies and filling unique and intricate air voids and gaps.

#### Typical applications

- E-mobility (HEV, NEV, batteries)
- Between any heat-generating semiconductor and a heat sink

#### Typical properties of uncured material

BERGQUIST® GAP FILLER TGF 2200 APS Part A	
Viscosity, Rheometer, Pa⋅s	
Low shear rate 1.0 s <sup>-1</sup>	

BERGQUIST<sup>®</sup> GAP FILLER TGF 2200 APS Part B

Viscosity, Rheometer, Pa·s

Low shear rate 1.0 s<sup>-1</sup>

Mixed properties
Working time @ 25°C, min 106

#### Typical curing performance

#### Cure schedule

24 hours @ 25°C 60 minutes @ 100°C

#### Typical properties of cured material

#### **Physical properties**

Hardness, Shore 00, ASTM D2240, 30 seconds delay	53
Siloxane content, ΣD4-D10, ASTM F2466, ppm	80
Flammability, UL 94	V-0

## **Electrical properties**

Dielectric strength, ASTM D149, kV/mm	9.6
Volume resistivity, ASTM D257, Ω⋅cm	8.7×10 <sup>12</sup>

#### Thermal properties

Thermal conductivity, ASTM D5470,, W/(m-K) 2.2



### **GENERAL INFORMATION**

For safe handling information on this product, consult the Safety Data Sheet (SDS).

#### Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on the specifications of this product.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

#### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Storage condition: 5 to 25 °C for 6 months shelf life, in sealed containers with moisture barrier packaging. Shipping condition: -20 to 30°C within one week.

Do not return products to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

#### Conversions

(°C x 1.8) + 32 = °F kV/mm x 25.4 = V/mil mm / 25.4 = inches  $\mu$ m / 25.4 = mil N x 0.225 = lb N/mm x 5.71 = lb/in N/mm² x 145 = psi MPa x 145 = psi N·m x 8.851 = lb·in N·m x 0.738 = lb·ft N·mm x 0.142 = oz·in mPa·s = cP

#### Disclaimer

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