

# Electrolube<sup>®</sup> GFP850

# Thermally Conductive Gap Filling Pad

# DESCRIPTION

**Electrolube**<sup>®</sup> **GFP850** is a silicone based, thermally conductive and electrically isolating gap filling pad with a high thermal conductivity of 8.5 W/m-K. Due to its flexibility and softness, the **GFP850** is highly suitable for applications where height differences need to be adjusted. The material easily conforms to irregular surfaces, minimizing the overall thermal impedance.

READ ENTIRE TECHNICAL BULLETIN BEFORE USING THIS PRODUCT

# FEATURES AND BENEFITS

- Thermal conductivity of 8.5 W/m-K; aids rapid heat transfer over uneven surfaces
- Very soft, requires low compression force to ensure good wet-out
- Natural tack for easy processing and reduced interfacial resistance
- Available in a range of thicknesses and die-cut formats

## **APPROVALS**

Standard	Status
RoHS	Compliant
REACH	Compliant

## **PRODUCT INFORMATION**

GFP850 is typically converted into customer specific shapes and sizes. Standard size is 320mm x 320mm (12.6 x 12.6"). Other thicknesses are available upon request.



# **TYPICAL PROPERTIES**

Category	Result	Unit	Test Method	
Physical Property				
Color	Gray Green		Visual	
Standard Thickness Range	1.0 to 5.0 0.040 to 0.200	mm inch	-	
Natural Tack	2 sides		-	
Density	3.6	g/cc	ASTM D792	
Hardness	35	Shore 00	ASTM D2240	
Operating Temperature Rang	e -60 to +180	°C	-	
Deflection at 10 psi	14	%	ASTM D5470 Modified	
Flammability Rating	Meets V-0		UL94	
Electrical Properties				
Dielectric Breakdown	8	kV/mm	ASTM D149	
Volume Resistivity	>10 <sup>10</sup>	Ohm - cm	ASTM D257	
Thermal Properties				
Thermal Conductivity	8.5	W/m-K	ASTM D5470	
Thermal Impedance at 10 psi	0.18	°C-inch <sup>2</sup> /W	ASTM D5470	
Thermal Impedance at 50 psi	0.09	°C-inch <sup>2</sup> /W	ASTM D5470	
GFP850				
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0 10	20 30 Pressure	40 (psi)	50 60	



## **APPLICATION GUIDELINES**

Remove protective liners before application.

#### ADDITIONAL INFORMATION

Shelf Life: 60 Months

The product should be tested to ensure its suitability for the end application conditions.

#### **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**

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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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