Our Silicone Bonded Mica Sheet is a versatile and high-performance heat and electrical insulation material. It is made from a combination of muscovite mica bonded with a special silicone resin. The result is a rigid sheet that can withstand elevated temperatures and provide very good dielectric strength.

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Because of its combination of thermal and electrical properties, Silicone Bonded Mica is used in a variety of areas. These include high temperature washers and gaskets, brake grid insulators, thermal and electrical barriers and more.

This type of mica sheet will withstand continuous temperatures up to 500°C plus short-term spikes to 600°C. It has a very low thermal conductivity that effectively prevents heat transfer.

Silicone Bonded Mica is a rigid sheet with good mechanical strength. At ambient temperatures it has a compressive strength of 350 MPa. It can also be cut, machined and drilled very accurately.

Applications

- Electrical and thermal insulation for high temperature ovens.
- The manufacture of insulators for heat exchangers.
- Brake grid insulators.
- Custom stand off insulators for high temperature requirements.
- High temperature, dielectric gaskets and washers.
- Bolt insulators.
- The manufacture of insulation components for high voltage machinery, switchgear, furnaces and welding machines.
- As an insulation material in the glass, ceramic, metal processing and power generation sectors.

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Technical Details

Colour	Light / Silver Grey
Mica	Muscovite Mica
Maximum Continuous Temperature Resistance	500°C
Maximum Short-Term Temperature Resistance	600°C
Binding Resin	Silicone
Resin Content	<12%
Compressive Strength (ambient)	350 mPA
Compressive Strength (@ 350°C)	200 mPA
Specific Gravity (@ 20°C)	2.05 to 2.15
Dielectric Strength (ambient)	>20 kV/mm
Weight Loss after Initial Heating	<2%
Thermal Conductivity	Low
Chemical Resistance	Excellent

Available Sizes, Forms and Styles

Standard Thicknesses

- 0.5mm
- 0.8mm
- 1mm
- 1.5mm
- 2mm
- 3mm
- 4mm
- 5mm
- 6mm

Other thicknesses may also be available upon request.

Pieces, Cut Strips, Custom Sizes and Special Requests

In addition to the variety of standard size sheets offered via our website, we're always happy to help with special requirements. If the size you require for your project isn't listed here please do reach out to us. We'll do our very best to help in any way we can.

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