

# Technical Data Sheet

## SW-MICANITE FLEX M & P (flexible mica sheets)

### Description:

**SW-MICANITE FLEX M & P** sheets are designed for providing outstanding thermal and electrical insulation for various heating elements used in household and industrial appliances such as hair dryers, tumble dryers, strip heaters,... and for all other applications where excellent resistance to thermal, mechanical and electrical properties are required.

**SW-MICANITE FLEX M & P** sheets can be formed into tubular shapes at room temperature.

Heating up **SW-MICANITE FLEX M & P** sheets to a maximum temperature of 150° C for max. 1 minute will result in an improved flexibility for applications, which require optimum conformability.

### Composition:

**SW-MICANITE FLEX M & P** sheets consist of minimum 90% Muscovite alternatively Phlogopite impregnated with an outstanding high temperature resistant flexible silicone resin.

### Delivery form:

Thickness:	0.1 mm – 0.3 mm	± 0.02 mm
	0.4 mm – 0.6 mm	± 0.03 mm
	0.7 mm – 1.0 mm	± 0.04 mm
	1.1 mm – 1.95 mm	± 0.06 mm
	2.0 mm – 6.00 mm	± 7.00 %
Width:	1,000 mm	± 0.20 %
Length:	max. 2,400 mm	± 0.20 %

Customized strips or parts according to customers' drawings and/or requirements.



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<u>Technical Data</u>	<u>Muscovite</u>	<u>Phlogopite</u>
Mica content: (IEC 60371-2)	≥ 90 %	≥ 90 %
Bond content (Silicone): (IEC 60371-2)	≤ 10 %	≤ 10 %
Density: (IEC 60371-2)	1.70 – 2.10 g/cm <sup>3</sup>	1.70 – 2.10 g/cm <sup>3</sup>
Heat resistance: in continuous service in intermittent service	500 °C 700 °C	700 °C 900 °C
Oxygen Index: (ASTM-02583)	90	90
Dielectric strength: at 20°C (IEC 60243)	~ 20 KV/mm	~ 18 KV/mm
Thermal conductivity: at 200°C at 400°C at 600°C (DIN 52612)	~ 0.20 W/(m·K) ~ 0.35 W/(m·K) -	~ 0.20 W/(m·K) ~ 0.35 W/(m·K) ~ 0.60 W/(m·K)
Thermal expansion: Perpendicular Parallel	60 x 10 <sup>-6</sup> /°K 10 x 10 <sup>-6</sup> /°K	60 x 10 <sup>-6</sup> /°K 10 x 10 <sup>-6</sup> /°K

### Conformity:

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

Directive 2011/65/EU on the Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Classification V-0 by UL94 for Flammability Tests of Plastic Materials for Parts in Devices and Appliances

Full details can be found in our certificates and declarations of conformity.

**Note:** These technical data are average results of laboratory tests conducted under standard procedures and are subject to variations, and do not constitute a warranty or representation for which we assure legal responsibility