

Technical Data Sheet

SW-COMMUTATOR M & P (epoxy mica sheets)

Description: *SW-COMMUTATOR M & P* sheets are hard, dense mica plates used in segments, separators and spacers. They exhibit good electrical & thermal properties and mechanical strength.

SW-COMMUTATOR M & P sheets can be sawed, shared and punched into customized shapes. Its superior uniformity enables automatic feeding and stacking within high speed assembly operations.

SW-COMMUTATOR M & P sheets are used within a wide range of small and medium size commutators for all kind of household applications, industrial equipment and power tools.

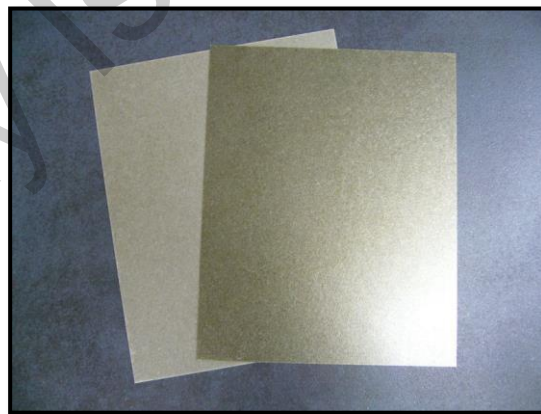
Composition: *SW-COMMUTATOR M & P* sheets consist of minimum 90% Muscovite alternatively Phlogopite impregnated with a specially developed epoxy resin.

Delivery form:

| | | |
|------------|------------------------|-----------|
| Thickness: | 0.2 mm – 1.9 mm | ± 0.02 mm |
| Width: | 1,000 mm | ± 0.20 % |
| Length: | 600 mm – 1,200 mm lang | ± 0.20 % |

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

Processing: *SW-COMMUTATOR M & P* sheets can be easily punched, or sheared. Tools for punching precise parts should be provided with spring loaded hold-down plates.



Technical Data Sheet

SW-COMMUTATOR M & P (epoxy mica sheets)

| <u>Technical Data</u> | <u>Muscovite</u> | <u>Phlogopite</u> |
|---|----------------------------|----------------------------|
| Mica content: (IEC 60371-2) | ≥ 90 % | ≥ 90 % |
| Bond content (epoxy binder content): (IEC 60371-2) | ≤ 10 % | ≤ 10 % |
| Density: (IEC 60371-2) | ~ 2.20 g/cm ³ | ~ 2.20 g/cm ³ |
| Compressibility: Ce-elastic Cp-plastic (IEC 60371-2) | ≤ 2.5 % ≤ 2.5 % | ≤ 2.0 % ≤ 2.0 % |
| Flexural strength: (IEC 60371-2) | ≥ 300 N/mm ² | ≥ 300 N/mm ² |
| Elastic modulus: (IEC 60371-2) | ≥ 80,000 N/mm ² | ≥ 70,000 N/mm ² |
| Temperature limit of application: | 150 °C | 150 °C |
| Resistance to exudation and displacement: | 200 °C | 200 °C |
| Dielectric strength: (IEC 60243) | ≥ 20 KV/mm | ≥ 20 KV/mm |
| Tracking resistance: (IEC 60112) | ≥ 500 V | ≥ 600 V |
| Arc resistance: (ASTM-D495) | 4 s | 4 s |

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**)

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.