

HEAT_MIC.DOC(0200) ATTAMICA -H

Attamica-H is based on muscovite mica paper bonded with a heat resisting silicone resin. Several layers of the resin impregnated mica paper are pressed under heat and high pressure to form rigid sheets. The resulting fully cured laminate has good mechanical electrical and thermal properties. It is silver in colour, hard and rigid, may be punched, cut into various shapes & sizes and is available in a range of thicknesses.

APPLICATIONS

Applications include base and covering plates for electric toasters, hair-driers and many other domestic appliances as well as free standing heating elements, busbar supports and platen insulation and other thermal barriers. The material is used in many other applications where a thermally stable asbestos free product is required. The material generates very low smoke and odour at the initial heating only. If it is to be used in an enclosed environment, heat treatment prior to use is therefore recommended.

| General properties | |
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| Type of mica | Muscovite mica paper based |
| Binder | approx 10% silicone resin |
| Colour | Silver |
| Density | 2.1 - 2.2 |
| Electrical properties | |
| Electric strength (min.) | 25 kV/mm |
| Insulation resistance | 10 16 Ohms/cm @ 20°C |
| Colour | < 1% after 24 hours |
| Mechanical properties | |
| Flexural strength | 200 MPa |
| Tensile strength | 140 MPa |
| Compressive strength (22°C) | 360 MPa |
| Compressive strength (200°C) | 235 MPa |
| Thermal properties | |
| Weight loss at 550°C | < 2% |
| Specific heat | 866 J/kg/°C |
| Thermal conductivity | 0.3 W/mK |
| Thermal expansion | $\wedge 60 \times 10^{-6} \text{cm/cm/K}$ |
| Thermal expansion | $// 10 \times 10^{-6} \text{cm/cm/K}$ |
| Temperature range | 500°C continuous, 700°C intermittent |
| Specifications - IEC 371-3-3. VDE 0332 and DIN40612-H.E.M 3327 | |
| Sheet sizes | 1000 x 1200 mm (other sheet sizes available on request) |
| Thickness range | 0.1mm to 75mm |

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