

# Laminate



## VETRONITE POLYIMIDE 64160

- Excellent mechanical properties at high temperatures up to 250°C
- Very good electrical properties
- Excellent cohesion between layers
- Very good resistance to solvents and dielectric liquids

|                                                | Unit              | Value        | Test norm     |
|------------------------------------------------|-------------------|--------------|---------------|
| <b>Mechanical properties</b>                   |                   |              |               |
| Flexural strength at 23°C                      | MPa               | 490          | ISO 178       |
| E-modulus                                      | MPa               | 24000        | ISO 178       |
| Flexural strength at 200°C                     | MPa               | 360          | ISO 178       |
| Compressive strength $\perp$ at 23°C           | MPa               | 640          | ISO 604       |
| Tensile strength                               | MPa               | 300          | ISO 527       |
| Shear strength //                              | MPa               | 55           | IEC 60893-2   |
| Impact strength (IZOD), //                     | kJ/m <sup>2</sup> | 50           | ISO 180/2A    |
| <b>Electrical properties</b>                   |                   |              |               |
| Insulation resistance after immersion in water | Ohm               | 1.00E+12     | IEC 62631-3-3 |
| Breakdown voltage // 90°C in oil               | kV                | 60           | IEC 60243-1   |
| Electric strength $\perp$ at 90°C in oil       | kV/mm             | 20           | IEC 60243-1   |
| Comparative tracking index CTI                 |                   | 250          | IEC 60112     |
| <b>Thermal properties</b>                      |                   |              |               |
| Temperature index (TI)                         | °C                | 180          | IEC 60216     |
| Thermal conductivity                           | W/m.K             | 0.5          | ISO 8301      |
| Linear expansion coefficient //                | 1.0E-6/K          | 15           | ISO 11359-2   |
| <b>Physical properties</b>                     |                   |              |               |
| Density                                        | g/cm <sup>3</sup> | 1.95 +/- 0.1 | ISO 1183      |
| Water absorption                               | %                 | 0.25         | ISO 62        |

### Description

Vetronite Polyimide 64160 is special laminate made of fine weave glass fabric bonded with high temperature resistant polyimide resin.

### Specifications

IEC/DIN EN 60893 PI GC 301

### Colour

Dark brown

### Applications

Insulation of presses, thermal machined insulator parts, insulation of die casting machines and presses, glass industry, cast rubber moulds.

### Form of delivery

Sheet format 1250 x 1250 mm  
Thickness range 0.35 to 40 mm

Thickness tolerance acc. to EN 60893-3-2

Other thicknesses on request.  
Also available as panels or machined parts.

### Machining

Machining with diamond tools preferred.

The data supplied are typical values. They are not to be considered specification values. All of the information, suggestions, and recommendations about these properties and uses of the products herein are based on tests and data believed to be accurate; however, the final determination regarding the suitability of any material described herein for the contemplated application, the manner of such use, and whether the use infringes any patents is the sole responsibility of the user. There is no warranty - expressed or implied - including, without limitation, warranties of merchantability or fitness for a particular purpose. Under no circumstances shall we be liable for incidental or consequential loss or damage.

VRI Composites custom fabricates insulation materials to the exact specifications and drawings specified by our customers. We offer our customers the proper product for their specific application. A variety of dimensions and diameter sizes are available. Product colors vary according to material type.

VRIR 03/2026