

TECHNICAL DATA



Vector Systems Thermoplastic Material Advantages

- Infinite shelf-life without refrigeration
- Fast processing cycles (compared to thermosets)
- Lightweight
- High strength and stiffness
- Inherent toughness
- Solvent resistant
- Vibration damping
- Usable in highly contoured parts.
- Ability to remold and sonically weld
- Environmentally friendly - recyclable

The data listed has been obtained from carefully controlled samples considered to be representative of the product described. Because the properties of this product can be significantly affected by fabrication and testing techniques employed and since Vector Systems does not control the conditions under which its products are tested and used, Vector Systems cannot guarantee that the properties listed will be obtained with other processes and equipment.

Flexile™ PEI

Flexile™ PEI is a polyetherimide thermoplastic composite material that is inherently flame resistant with low smoke emission. It exceeds the OSU 35/35 requirement and is ideal for transportation interior and structural applications, due to its flammability properties and outstanding toughness.

Flexile PEI composite material can be supplied in a biaxial fabric form, as a unidirectional product, and as a multilayer, multidirectional pre-ply fabric. Multilayer and multidirectional products can be supplied in widths up to 95 inches (2.4 meters). Two dimensional and unidirectional products can be supplied in widths up to 195 inches (5 meters).

Neat Resin Properties

Vicat Softening Temp. Rate B/50.....	426°F (219°C)
Specific Gravity.....	1.27
Processing Temperature.....	590°F (310°C)
Moisture Absorption (23C/Sat.).....	1.25 %
Moisture Absorption (23C/50% RH.)....	0.7 %
Tensile Strength.....	16.0 ksi (110 MPa)
Tensile Modulus.....	0.52 Msi (3.61 GPa)
Elongation at Yield.....	7%
Flexural Strength.....	24.0 ksi (165 MPa)
Flexural Modulus.....	0.51 Msi (3.53 GPa)

For more information, data, samples and pricing contact:

Todd Young
1007 Eastwood St.
Holmen WI, 54636

E-mail Info@vsicomposites.com
www.vectorams.com
Phone 608-721-4191