

Sheetex® V-1000

Description

Sheetex® V-1000 is a vinyl ester sheet molding compound designed to be co-cured with Simprex® M850 prepreg under compression or vacuum bag molding.

Sheetex® V-1000 is available in chopped strand mat fiberglass. It has been designed to provide high performance when co-cured with Simprex® M850.

Sheetex® V-1000 can be black pigmented if it has to be co-cured with carbon fiber Simprex® M850 prepreg.

Uncured Sheetex® V-1000 Properties

Chopped mat	E-Glass
Mat Areal Weight (g/m ²)	≈ 450
Resin Areal Weight (g/m ²)	≈ 1150
Curing time at 160°C (min)	5
Curing time at 140°C (min)	10
Curing time at 120°C (min)	20
Maximum Tg - DSC (°C)	140

Key Features and benefits

- **Uncured sheet**

- ✓ Shelf life: **12 months @ 70°F (21°C)**, and 24 months @ 41°F (5°C).
- ✓ Versatile curing temperature: 250-320°F (**121-160°C**).
- ✓ Suitable for low pressure: 1-3 bar.

Typical Mechanical Performance

P max, g/cm ³		1.75 D-792 ASTM	1.6 * TS EN ISO 1183
Tensile, Strength,	MPa	ASTM D-638 105	ISO 527-4 559.78*
	Ksi	15.2	-
Modulus,	GPa	11.4	-
	Msi	1.6	-
Flexural, Strength,	MPa	ASTM D-790 228	ISO 14125 308.1*
	Ksi	33.1	-
Modulus,	GPa	11.4	-
	Msi	1.6	-

*Specimen V1000, 9mm, cured 20min at 120°C and 15min at 145°C.

Storage and Handling

All prepregs are wrapped in a barrier film immediately after impregnation. During storing and handling, the following notes must be considered:

- Prepregs should be stored in their original packaging barrier film, or an equivalent film, at recommended temperature.
- If stored in a cold chest, before use, the prepreg roll has to be out of the freezer and remain tightly sealed for 48 hours, time required to reach ambient room temperature.
- It is highly recommended to handle the prepreg at a clean area where relative humidity is $\leq 50\%$ and ambient temperature is 20-23°C.