



Introduction

This is one of a series of prepregs designed for the manufacture of high-pressure laminates capable of short-term exposure to temperatures of 200°C. The plain weave carbon reinforcement provides a high strength and stiffness to weight ratio. Laminates produced from these prepregs find applications in the manufacture of doctor blades, rotating vanes in fuel pumps and applications where the conductivity of the reinforcement can be utilised.

Reinforcement Construction

Weave Style	Plain
Fabric Weight nom	300 gsm
Warp Count nom	3.7 per cm of 400 Tex (6K)
Weft Count nom	3.7 per cm of 400 Tex (6K)

Physical Properties

Resin Content	42 ± 3% ^W / _W
Volatile Content	< 1%
Resin Flow Typical	%
Width	As agreed with customer

Recommended Cure Schedule

Lay up the required number of plies of prepreg between sheets of high temperature release film. Insert into a press and apply a pressure of 40 – 50 Bar on the laminate. Raise the temperature to 175 ± 5°C and maintain for 45 to 60 minutes. Cool at a rate of less than 20°C per minute before releasing the pressure.

Shelf Life

To obtain the maximum useful life from this material it should be stored in refrigerated conditions. On removal from freezer, the prepreg should remain sealed in the polythene sleeve until it has achieved room temperature to avoid problems with moisture condensation.

Storage Conditions	Storage Life
-18°C	12 Months
0 – 5°C	6 Months
20°C	1 – 2 Months

Typical Laminate Properties

Nominal cured ply thickness 0.35 mm

Full Laminate properties have yet to be established for this product.