

Epoxy tooling prepreg system

## RP801

### Applications

- Composite tooling

TDS023





## Description

RP801 is an epoxy tooling prepreg system capable of withstanding temperatures up to 190°C after full post cure.

RP801 is available in carbon and glass woven fabrics from 200 - 800 g/m<sup>2</sup> impregnated with epoxy resin. RP-801 prepreg allows high quality tooling laminates to be produced directly from a low temperature master model permitting a wide choice of master model materials. Using a low temperature vacuum bag and autoclave process for initial cure, the tool laminate can then be demoulded for freestanding post cure.

## Key Features & Benefits

- Initial cure from 60°C to 70°C
- Post cure: 170°C
- Autoclave processing
- Excellent surface finish

## Shelf life

Storage Temperature	Shelf life
-18°C	12 months
20°C	Tack life: 5 days Out life: 7 days

## Material Types

Fibre Type	Weave Style	Weight	Thickness/Ply	Width
Carbon	Twill 2/2	200 g/m <sup>2</sup>	0.23 mm	1250 mm
Carbon	Twill 2/2	645 g/m <sup>2</sup>	0.72 mm	1250 mm
Glass	8HS	300 g/m <sup>2</sup>	0.25 mm	1250 mm
Glass	Twill 2/2	800 g/m <sup>2</sup>	0.70 mm	1250 mm

Other fabric styles available



## Cure Cycle

**Preferred initial cure** can be either of the following:

- 60°C for 8 hours
- 70°C for 4 hours

**Heat ramp up rate:** 1.0°C/minute up to temperature, under 7 bar pressure and >0.9 bar vacuum. Cool naturally. Tooling can be removed from the master after this cure.

**For post cure**, the tool must rest on a level surface to prevent possible deformation. The recommended post cure cycle is as follows:

- From initial cure temperature, ramp up at 1°C per minute up to 170°C and cure for >2.5 hours, then cool naturally. This will provide a Tg >170°C (DSC).
- Post cure > 4h @ 170°C provides a Tg of 190°C (DSC).

The maximum heat ramp up rate at each stage is 1°C/minute.

**Health and Safety:** Refer to the Material Safety Datasheet before use.

# Find out what PRF can do for your business

Make an enquiry today at:

t: +44 (0) 1202 680022

e: [enquiries@prfcomposites.com](mailto:enquiries@prfcomposites.com)

[www.prfcomposites.com](http://www.prfcomposites.com)

## PRF Composite Materials

3 Upton Road

Poole

Dorset BH17 7AA

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