



Product Information

Resin	Hardener	Mixing ratio by weight
EC 152	W 152 MR	100:30

Description: High performance un-filled epoxy laminating resin, suitable for the moulding of carbon fibre, glass fibre and aramid / kevlar fabrics. A wide variety of hardeners allow for desired pot life's and gel times to be achieved. This laminating resin will cure at room temperature, although it is recommended that a post cure is done at a higher temperature to obtain the best mechanical performance from the resin. As well as its high mechanical properties this resin cures clear so it is suitable for both structural and cosmetic applications.

Uncured Properties

	Resin (EC152)	Hardener (W152MR)
Colour	Pale / Yellow	Pale / Yellow
Viscosity @ 25°C	1200 – 1800 mPas	30 - 60 MPas
Density @ 25°C	1.13 – 1.17 g/ml	0.94 – 0.98 g/ml

Cured Properties

	EC 152 / W 152 MR
Density @ 25°C	1.08 – 1.12 g/ml
Hardness @ 25°C	85 – 89 Shore D/15
Glass transition (Tg)	85 – 90 °C
Flexural strength	120 – 130 MPa
Maximum strain	5.0 – 7.0 %
Strain at break	6.0 – 8.0 %
Flexural elastic modulus	3400 – 3800 MPa
Tensile strength	65 – 75 MPa
Elongation at break	6.0 – 8.0 %
Compressive strength	95 – 105 MPa



Processing Data:

	Pot Life @ 25°C (50mm / 200ml)	Exothermic Peak @ 25°C (50mm / 200ml)	Gelation Time @ 25°C (1mm)
EC152 / W152MR	35 – 45 minutes	210 °C – 235 °C	5h – 7h

How to use:

Mix 100 parts resin to 30 parts of hardener by weight, this is very important as with all epoxies incorrect mixing ratios will result in a very poor cure of the resin.

Mix thoroughly for at least a minute.

This epoxy system is highly reactive and once mixed will start to exotherm, start lamination of the part as soon as the resin has been properly mixed.

Demoulding Information

	EC152 / W152 MR			
Temperature	@ 15°C	@ 20°C	@ 25°C	@ 30°C
Demoulding Time	20h	12h	10h	8h

Cure / Post Cure Information:

Cristex' epoxy laminating system will cure at room temperature, after demoulding it will take several days for the cure to complete. In order to achieve the best mechanical properties from the resin a post cure is recommended. For most applications a post cure at 50°C is enough however by slowing down the ramp rate or increasing the part cure temperature to 80°C or 90°C this will improve the mechanical performance of the finished part.

Storage

Epoxy resins and hardeners have a shelf life of two years in the original sealed containers stored in a cool, dry place. The hardeners are moisture sensitive, therefore it is good practice to close the vessel immediately after each use.

Handling precautions

Refer to the safety data sheet and comply with regulations relating to industrial health and waste disposal.

Disclaimer: The information given in this publication is based on the present state of our technical knowledge, buyers and users should make their own assessments of our products under their own application conditions.