



Product Information

Resin	Hardener	Mixing ratio by weight
EC 14	W 152 HR	100:30

Description: Two Component epoxy resin suitable for hot press, RTM and hot curing applications. The EC 114 cures clear and is used mainly for small and medium sized components within the sporting and automotive industries.

Uncured Properties

	Resin (EC14)	Hardener (W152HR)
Colour	Pale / Yellow	Pale / Yellow
Viscosity @ 25°C	6.000 – 8.000 mPas	30 - 80 mPas
Density @ 25°C	1.13 – 1.17 g/ml	1.02 – 1.06 g/ml

Cured Properties

		EC 14 / W 152 HR
Density @ 25°C		1.10 – 1.14 g/ml
Hardness @ 25°C		88 – 92 Shore D/15
Glass transition (Tg)	15 min 80 °C 2 ° scan (25-150 °C)	95 – 100 °C 100 – 106 °C
Flexural strength		110 – 120 MN/m ²
Maximum strain		4.5 – 6.5 %
Strain at break		10 – 14 %
Flexural elastic modulus		3.200 – 3.500 MN/m ²
Tensile strength		65 – 70 MN/m ²
Elongation at break		3.0 – 4.5 %
Compressive strength		90 – 100 MN/m ²



Processing Data:

	Gelation Time @ 80°C (2mm)	Gelation Time @ 25°C (100ml)
EC14 / W152HR	115 sec – 125 sec	12 min – 18 min

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

	EC14 / W152HR
Temperature	@ 80 °C (2mm)
Demoulding Time	13min – 18min

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.