

DIY HT150 CC Coupling Coat Epoxy Resin

2 part epoxy coupling coat system

For use in conjunction with DIY HT150 GC (Gel Coat) and DIY HT170 laminating resin as part of the DIY Composites epoxy high temp tooling system.

DIY HT150 CC is a two component, thixotropic epoxy resin system specifically formulated to provide excellent adhesion between DIY HT150 GC and DIY HT170 Laminating resin. The DIY HT150 CC resin system is specifically formulated for high temperature applications. It is made up of HT150 CC (Resin) and H150CC (Hardener)

Special Features

- High heat distortion temperature
- Easy application on vertical surfaces

Mix Ratio

	HT150 CC (Resin)	:	H150 CC (Hardner)
By Weight	100	:	28

Product Data

Property	Units	HT150 CC	H150 CC	Mix
Material	-	Epoxy resin	Formulated amine	Epoxy
Appearance	-	Brown thixotropic paste	Amber liquid	Brown thixotropic paste
Viscosity (25°C)	mPa.s	80,000 – 140,000	100 – 160	9,000 – 14,000
Density (25°C)	g/cm ³	1.10 – 1.20	0.92 – 0.97	1.00 – 1.10
Pot Life (200g, 25°C)	Minutes	-	-	60 – 70

Demould Time (200g, 25°C)	Hours	-	-	24 may be longer in cold conditions
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Method of Use

Mixing and Application

DIY HT150 CC (Resin) should be mixed with DIY H150 CC (Hardener) according to the indicated mixing ratio. Both components should be thoroughly mixed, care should be taken to avoid air entrapment and make certain that material at bottom and sides of container is thoroughly stirred into centre. When the gelcoat has reached a tack free state, the mixed material should be evenly applied onto the gelcoat by brush. Care must be taken to ensure an even coating and to avoid the inclusion of air bubbles. See the technical datasheet for DIY HT150 GC for further details on that product and about how to identify the tack free state.

Cure and Post Cure

To achieve full high temperature properties, a step wise post cure treatment is recommended. Allow the product to cure at room temperature for at least 24 hours, then heat to 40°C for 1 hour, followed by 60°C for 1 hour, followed by 80°C for 1 hour, followed by 100°C for 1 hour, followed by 120°C for 3 hours.

To prevent any distortion during the post cure cycle, the unit should be placed on a conformer. When post-curing is complete, let the unit cool down slowly to room temperature, preferably in the oven. Sudden change in temperature can cause distortion or warping.

The product can be used without post cure or with partial post cure, but will not achieve full high temperature properties. The product can be post cured at higher temperatures (up to 150°C), however, care should be taken if using the product at these temperatures as any air voids from the laminating process can cause bubbling or delamination between the layers.

Laminating

After the DIY HT 150 CC coupling coat system has been applied to the back of HT150 GC gel coat that is at the tack stage and any air bubbles allowed to escape as part of the DIY high temperature tooling system we apply a 300gsm layer of powder bound CSM matting (glass). This is then wetted out with remaining HT150 CC Coupling Coat

resin. This is then allowed to fully cure over night before continuing to build up tool re-enforcement. For further details on the tool making process please view the 'DIY High Temperature Epoxy Tooling Guide'.

For full details on the DIY HT150 GC and DIY HT170 Laminating resin please consult the relevant data sheets.

Storage

DIY HT150 CC and H150 CC should be stored in original, unopened containers between 15 and 25°C. KEEP THE PACKING TIGHTLY SEALED WHEN NOT IN USE.

If stored under the above conditions, The HT150 CC System (HT150 CC & H150 CC)will have a shelf life of 12 months, from the date of production.

Packaging

DIY HT150CC system is supplied in 0.25kg / 0.5kg / 1kg packs

Further Information

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DIY Composites requests that the user reads, understands with the information contained herein and the current Material Safety Data Sheet.

DIY Composites

DIY Composites LTD markets and sells composite materials online and from its premises for the end user.

For any enquiries please contact DIY Composites by email at info@diycomposites.co.uk