

PRODUCT DATA

5800 CARBO LPL

DESCRIPTION

5800 Carbo LPL is a thixotropic epoxy adhesive designed for the horizontal and vertical impregnation of structural reinforcing textiles such as CarboComp Textile 225, 300 and 600.

APPLICATION

- Excellent adhesion.
- Solvent-free.
- Thixotropic formulation, ideal for overhead and vertical application.
- Long pot life allows application even at high temperature.
- Low exothermic formulation allows application over a wide temperature range.
- Suitable for both wet and dry lay application techniques.

PROPERTIES

5800 Carbo LPL is a solvent free, 2 component epoxy system, specifically formulated for the impregnation of Carbon and Aramid textiles used in structural strengthening of buildings and structures. 5800 Carbo LPL is used to adhere these textiles to concrete, timber or masonry and is suitable for horizontal and vertical application.

INITIAL TEMPERATURE

	14°C	20°C	25°C	30°C
Pot Life ¹	110 min	69 min	60 min	52 min
Gel Time ²	83 min	42 min	33 min	25 min
Application Time ³	66 min	25 min	16 min	8 min

¹ Time for mixed 5800 Carbo LPL to rise from initial temperature to T_{max} when placed in a 1 litre plastic bucket.

² Time for mixed 5800 Carbo LPL to change from liquid to gel state.

³ Application window for mixed product.

APPLYING - DRY LAY METHOD

- Surfaces to receive adhesive should be prepared by suitable mechanical means prior to application to remove laitance, dust, oil and grease.
- Surfaces should be dry prior to application.
- The concrete should be at least 28 days old and free of cracks.

TYPICAL DATA (TYPICAL VALUES)

A-Component: (resin)

Colour	Grey
Viscosity	8000 mPas at 20°C and 4370 mPas at 30°C
Density	1.092 kg/l

B-Component: (hardener)

Colour:	Bright to Light Yellow
Viscosity:	315 mPas at 20°C and 201 mPas at 30°C
Density:	1.046 kg/l

Mixed Product

Colour:	Grey
Initial Viscosity:	5600 mPas at 20°C and 3272 mPas at 30°C
Density:	1.078 kg/l

Tensile Strength* (EN1500527): 34.37 N/mm²

Compressive Strength* (EN12190): 60.89 N/mm²

Flexural Strength* (EN13892-2): 43.34 N/mm²

Modulus of Elasticity* (EN13412): 2.46 G Pa

Mixing Ratio: 2.2 kg / 1 kg

Glass Transition Temperature T_g (EN12614): 92.19°C

Application Temperature: Min. 10°C, Max. 35°C (ambient and surface temperature)

Consumption: CarboComp Textile and AraComp 500 - 1750 g/m²
*Consumption depends on the roughness and porosity of the surface, textile weight, and application technique used.

Shelf Life: 24 months from date of production in the original, unopened and undamaged packaging. Store 5800 Carbo LPL in a cool, dry place (+10°C and 30°C)

Adhesion: >3 N/mm² (rupture in concrete)
*After 7 days cure at 23°C

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- Mix the A & B components with a drill and paddle until homogeneous.
- Apply an initial layer of 5800 Carbo LPL onto the structure.
- Push the textile into the resin with a profiled roller.
- Apply a second layer of 5800 Carbo LPL.
- Make sure that the textile is fully impregnated (wet).

APPLYING - WET LAY METHOD

- Surfaces to receive adhesive should be prepared by suitable mechanical means prior to application to remove laitance, dust, oil and grease.
- Surfaces should be dry prior to application.
- The concrete should be at least 28 days old and free of cracks.
- Mix the A & B components with a drill and paddle until homogeneous.
- Apply an initial layer of 5800 Carbo LPL onto the structure.
- Using a resin bath or other suitable method, fully saturate the chosen CarboComp textile and remove excess resin.
- Apply saturated textile onto primed and prepared substrate ensuring no air is trapped during the process.
- Finish by brush or roller to ensure even distribution of material.

COATINGS

Should coatings be required, apply a layer of adhesive evenly over the surface and broadcast with quartz aggregate to provide mechanical key. Allow to cure for 24 hours and then apply chosen coating system. Stonhard recommends Carboguard 690 and Carbothane 134.

PACKAGING

Standard Packaging:

- A-Component: 2.2 kg
- B-Component: 1 kg

CLEANING

Uncured product can be removed with 5900, cured product requires mechanical removal.

PRECAUTIONS AND SAFETY REQUIREMENTS

- Avoid contact with skin and the eyes.
- Wear protective gloves, clothes and safety glasses.
- Prevent all contact of 5800 Carbo LPL with water or moisture.
- For more information: See Safety Data Sheet.

NOTES

- Safety Data Sheets for 5800 Carbo LPL products are available upon request.
- A staff of Technical Service Engineers is available to assist with installation or to answer questions related to 5800 Carbo LPL products.
- Requests for technical service or literature can be made through local sales representatives and offices or corporate offices located worldwide.

Important:

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