

PC[®] 5800 CARBO LPL

1. Description

PC[®] 5800 Carbo LPL is a thixotropic epoxy glue suitable for the horizontal and vertical impregnation of different kinds of textiles like carbon fibre and aramid textiles.



2. Application

- Because of the balanced formulation, applications above the head or vertical applications can easily be made.
- Excellent adhesion.
- Solvent free.
- At high temperatures, the pot-life is sufficiently long to allow an easy use.
- Due to the low exothermic reaction the product can be applied in a broad temperature range. Both at low and high temperatures.

3. Properties

PC[®] 5800 Carbo LPL is a solvent free, 2 component epoxy system which is especially formulated for the impregnation of Carbon and Aramid textiles for structural strengthening of constructions. **PC[®] 5800 Carbo LPL** can be used for gluing these textiles to concrete, wood or masonry and this for both horizontal as vertical applications.

4. Technical 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
- Mixture
 - Colour: Grey
 - Initial viscosity: 5600 mPas at 20° C and 3272 mPas at 30° C
 - Density: 1.078 kg/l

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Temperature to start from				
	14 °C	20 °C	25 °C	30 °C
Pot Life¹	110 min	69 min	60 min	52 min
Gelification time²	83 min	42 min	33 min	25 min
Application time³	66 min	25 min	16 min	8 min

¹Time needed for a mixture of 660 g PC[®] 5800 Carbo LPL A and 300 g PC[®] 5800 Carbo LPL B to rise in temperature from « temperature to start from » to T_{max} when you put the mixture in a plastic bucket of 1 l.

²Time needed for a mixture of 660 g PC[®] 5800 Carbo LPL A and 300 g PC[®] 5800 Carbo LPL B to rise in temperature from « temperature to start from » to gelification time when you put the mixture in a plastic bucket of 1 l. The "gelification point" is the moment where the mixture changes fast from liquid into a dens mass.

³Time needed for a mixture of 660 g PC[®] 5800 Carbo LPL A and 300 g PC[®] 5800 Carbo LPL B to rise in temperature from « temperature to start from » to 40° C when you put the mixture in a plastic bucket of 1 l.

- Tensile strength (ENISO527)*: 34,37 N/mm²
- Compression strength (EN12190)*: 60,89 N/mm²
- Flexural strength (EN13892-2)*: 49,34 N/mm²
- E-modulus (EN13412)*: 2465,50 N/mm²
- Mixing ratio: 2.2 kg / 1 kg
- Application temperature: Min. 10°C, max. 35°C (ambient and surface temperature).
- Consumption: PC[®] CarboComp Textile and PC[®] AraComp ~ 500 - 800 g/m².
The consumption depends on the roughness and porosity of the surface.
- Shelf life: Ca. 24 months after production date in the original, unopened and undamaged packaging. Store **PC[®] 5800 Carbo LPL** in a cool and dry place (between +10°C and 30°C).
- Adhesion: > 3 N/mm² (rupture in concrete).

* After 7 days of hardening by 23°C

5. Processing

- Mix the A & B components intensively.
- Apply a first layer of **PC[®] 5800 Carbo LPL** on the structure which must be dry, free of cracks, dust, oil and grease. The concrete should be at least 28 days old.

- Push the textile into the resin with a profiled roller
- Apply a second layer of **PC[®] 5800 Carbo LPL**.
- Make sure that the textile / tissue is fully impregnated (wet).

6. Packaging

Standard packaging: A-component: 2.2 kg
 B-component: 1 kg

7. Cleaning

Uncured product can be removed with PC[®] 5900.

8. Precautions and safety requirements

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