



MC-CarboSolid 1209

(Formerly Known as MC-Dur 1209)

Epoxy adhesive for FRP Sheets for structural reinforcement

Product Properties

- Two-component Epoxy Resin Based Adhesive
- High Bond Strength
- Application even at high temperature ($\leq 40^{\circ}$ C)
- High Mechanical strength
- Excellent adhesive between FRP Sheets and prepared substrate
- High Penetration

Areas of Application

- Adhesive for high-tensile reinforcing sheets for reinforcement of components made of reinforced concrete and brickwork.
- REACh-assessed exposure scenarios: periodical water-contact, periodical inhalation, application.

Application Notes

Surface preparation

Before application of MC-CarboSolid 1209 all substrates must be verified for load-bearing capacity and prepared by means of a suitable surface blasting method. The substrates must be dry (residual moisture $\leq 6\%$, CM-method), free of cement laitance, dust, oil and other contaminants. A minimum pull-off strength of 1.5N/mm² is required. The bonding surface of the substrate must be protected from increasing backwards moisture.

Before application of FRP-sheets the evenness of the concrete surface must be checked. The leveling mortar MC-CarboSolid 1000 parat 09 can be used for leveling (roughness < 1.5 mm) according to the application advice indicated in the technical data sheet.

Mixing and Application

MC-CarboSolid 1209 Consists of two components, supplied in prepacked quantities. First, the base component is mixed thoroughly and then the hardener is added. Both components are mixed together thoroughly and homogeneously for at least 3 minutes. Slowly rotating mixers with paddle (max.300 rpm) are suitable for mixing. Care should be taken to keep entrainment of air to a minimum while mixing.

After mixing the resin must be refilled into a clean container and mixed again.

The freshly applied FRP-Sheets are coated with MC-CarboSolid 1209. Care must be taken during application that the carbon fibers are completely embedded in the adhesive.

General Information

High temperatures shorten while low temperatures extended all indicated times and intervals. As a rule of thumb a change in temperature of 10°C either halves or doubles the indicated pot life.

Furthermore, please note that higher temperatures reduce both the viscosity and the setting properties of MC-CarboSolid 1209. Varnish runs must be avoided. MC-CarboSolid 1209 should be stored inside at cool temperatures.

Safety Advice

Please Take notice of the Safety information and advice given on the Packaging labels and safety data Sheets.



Technical Data For MC-CarboSolid 1209

Characteristic	Unit	Value*	Comments
Density	Gm/cc	1,1	
Viscosity	mPa.s(cps)	3500	
Mixing Ratio	P.b.w	2:1	Resin: Hardener
Pot life	min	30 to 40	
Touch Dry	hour	2 – 3	
Full Dry	hour	24	

*All technical Data relate to 20°C and 50% relative humidity.

** At substrate temperature > 30°C the different layers of MC-Range FRP-Sheets must be applied fresh in fresh.

Product Characteristics for MC-CarboSolid 1209

Type of product	Epoxy Bonding Adhesive
Form	Resin and hardener
Cleaning Agent	MC-Reinigungsmittel U
Shelf life	12 months from the date of manufacture
Delivery	12 kg and 30 kg packs
Storage	Can be stored in original sealed packages at temperatures below 20°C (recommended > 15°C - < 20°C) in dry conditions.
Disposal	Empty Packs completely and dispose off carefully to protect our environment

Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

Note: - The information on this Data Sheet is based on our experiences and correct to the best of our knowledge. It is However, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our Data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are binding if given in written form. The accepted engineering rules must be observed at all times.

Edition: - MC/ND/190512, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.