

Description of Product

SUFFIX EP MRN 700, Epoxy two components! It does not contain solvents. It is in liquid form. It is used as a reinforcement product together with carbon fiber and glass fiber in floor covering and wall concrete coating applications. It is used to bond and saturate carbon fiber reinforcement fabrics to the concrete surface. It provides durability and strength on the surfaces it is applied to.

Areas of Use

Wall concrete coating application Lan, composite material production.

Advantages

Suitable for high durability and strength. It is suitable for application with a roller.

Physical Properties

Quality	Method	Properties	
		A Component	B Component
Appearance	-	Transparent, Liquid	Dark Yellow, Amber Color
Viscosity (Brookfield, mPas)	TS 5833 EN ISO 3219	1700 ± 300	1000 ± 500
Density (gr/ml, 25°C)	ASTM D1475 / DIN 53217 / ISO 2811	Mixture: 1000 ± 200	
Mixing Ratio	-	100	50
Hardness (Shore D)	ISO 868	Mixture: 1,1	
Glass Transition Temperature, Tg (°C)	EN ISO 11357-2	70	

* Optimum mechanical properties will be reached after 7 days at 23°C.

Application Information

Quality	Value	Standard
Pot Life (100 g A+B) (minutes)	40 ± 5	-
Curing Time (hours)	6 - 8	-
Full Curing (hours)	24	-

Mechanical Properties

Quality	Value	Standard
Tensile Strength (MPa)	> 35	ISO 527
Compression Strength (MPa)	> 35	ASTM D 695
Compressive Strength (MPa)	> 40	EN 196
Adhesion Strength (N/mm ²)	4,5	TS EN 1542

Application Information - Surface Preparation

To achieve perfect results, the mixing ratio must be applied correctly. Changing the mixing ratio causes the surface to not dry properly and not reach its final mechanical properties. It is essential to use a scale while preparing the mixture.

The application surface must be solid. Ambient temperature should be 18 - 23 °C and humidity level should be below 50%.

Application

50 g of component B must be mixed into 100 g of component A by weight. When weighing, component A should be weighed first and component B should be added to it. To obtain a homogeneous mixture, the components must be mixed thoroughly at low speed for 3-4 minutes. The system tends to heat up in the container it is mixed in. Only the amount of product to be applied should be mixed.

Before mixing, the material temperature is increased by 22°C-25°C.

The surface to be applied must be wetted with the resin mixture before laying the fiber. Afterwards, the fiber should be wetted with resin after being deposited on the part to be coated. At this point, special lamination cylinders or special rollers are used to ensure that the fiber gaps are thoroughly wetted with resin. This process not only ensures the lamination of the fiber but also eliminates air bubbles between the layers.

To increase strength and durability, fiber layers can be increased by the desired amount. The same process is repeated in each layer. Full hardening occurs after 24 hours at the specified temperature and humidity values.

Cleaning After Application

The equipment used during application should be cleaned with a suitable solvent immediately after application.

Storing and Shelf Life

Our products are kept tightly closed at room temperature, protected from sunlight. The resin part (component A) should be at 22°C-25°C, especially during winter months. Keeping the epoxy at lower temperatures causes crystallization and in this case a clear mixture cannot be obtained. If the epoxy temperature is below 10°C, the temperature of the material is carefully increased by 22 °C-25 °C with a water bath in the container.

It can be stored in its unopened original containers, in dry environments between 5°C and 25°C, for 1 year from the date of production. Material in opened buckets should be used immediately.

Packing

SUFFIX EP MRN 700 kg set;
Component A is a 10 kg plastic can
Component B 5 kg plastic can

Consumption

(A+B) 1m² @ 1 mm thick is 1.1 kg

Safety Precautions

SUFFIX EP MRN 700 should not be smoked during application and should be worked in well-ventilated environments, away from naked flames. It should not be forgotten that solvents are heavier than air and therefore will circulate on the ground. During application, work clothes, protective gloves, glasses and masks that comply with occupational and worker health rules should be used. Due to the irritating effects of the uncured product, the components should not come into contact with the skin or eyes. In case of contact, it should be washed with plenty of water and soap. If swallowed, consult a doctor immediately. For detailed information, please refer to the Safety Data Sheet (MSDS) or contact our technical units. Keep out of reach of children.

None of our instructions and technical specifications written herein are binding in general and EXCLUSIVELY in accordance with the protective rights of third parties and do not exempt you from the obligation to carry out the necessary examination to determine the suitability of our products. Our company is not responsible for any damages that may occur as a result of natural damage or due to use and/or product reliability or information and instructions, for whatever reason and to whatever extent.

