

C900

Polyester Chemical Anchor

1 - Description

Akfix C900 is polyester injection mortar for general purpose for solid and hollow supports having a short cure time. It is suitable for use in concrete, perforated bricks and cavity blocks in a wide range of applications.

2 - Properties & Features

- Suitable for solid and hollow structures.
- High solid content.
- Easy to extrude and to inject.
- Thixotropic, can be applied in vertical and horizontal direction.
- Fast curing.

3 - Fields of Application

The product recommended to use at Concrete Solid & hollow masonry, Hard natural stone, Solid rock, Voided stone or rock.

Typical applications; Canopies, Boilers, Bicycle racks, Hand rails, Masonry supports, Signs, Safety barriers, Balcony fences, Racking, Machinery, Satellite dishes.

4 - Approvals and Certificates

- ETA certified (ETA-24/0115).

5 - Product Information

Packacking	300 ml, 345 ml
Shelf Life	18 months
Storage Conditions	Store in cool and dry conditions between +5°C and +25°C
Color	Grey

6 - Technical Data

Physical Properties;

	Method / Conditions	Value
Basis		Unsaturated Polyester
Density	ASTM D 1875 / +20°C	1,65±0,05 g/ml
Compressive Strength	EN 12190	82 N/mm ²
Viscosity	/ 22°C	120000 – 200000 cP
Service Temperature	-	-40°C to +80°C
Reaction to fire	EN 13501-1	Euroclass E

Working and Loading Times;

Temperature	5 °C	10 °C	20 °C	30 °C	35 °C
Working Time (min)	25	15	6	4	2
Loading Time (min)	120	80	45	25	15

Installation Parameters;

Size		Application parameters				Admissible loads	
5.8 Grade Rod	Drill hole (d ₀)	Embedment depth (h _{ef})	Edge distance (C _{cr})	Spacing (S _{cr})	Torque moment (T _{inst})	Concrete C20/25 Tensile (kN)	Concrete C20/25 Shear (kN)
	mm	mm	mm	mm	N.m		
M8	10	80	80	160	10	8.7	5.4
M10	12	90	90	180	20	13.7	8.7
M12	14	110	110	220	40	16.9	12.5
M16	18	125	125	250	60	24.1	22.5
M20	24	170	170	340	120	35.8	35.0
M24	28	210	210	420	150	52.0	50.0

Theoretical Consumption;

Threaded bar	M8	M10	M12	M16	M20	M24
Diameter of threaded bar (mm)	8	10	12	16	20	24
Diameter of hole in concrete (mm)	10	12	14	18	24	28
Anchoring depth (mm)	80	90	110	125	170	210
Consumption per hole (ml)	5	8	14	26	49	173
Number of holes with 300ml cartridge	55	35	21	11	5	1
Number of holes with 345ml cartridge	65	42	25	13	7	2

Note: Jobsite/contractor installations usually result in more resin being injected than the theoretical requirement resulting in lower number of fixings per cartridge. The reduction to the number of fixings per cartridge in practice is greater for smaller diameter holes and shallower embedment depths.

7 - Directions for Use
Cartridge Use;


- Unscrew the cap of the cartridge
- Cut the foil below the metal clip. (required for 300ml cartridge)
- Screw the mixing nozzle onto cartridge
- Insert the cartridge in the gun
- Remove the mixture until the two components have a homogeneous light grey colour in the nozzle (Avoid using the first 10 ml)

Application;


- Choose a drill of suitable dimensions depending on the rod to be anchored
- Remove the water and dirt (dust and loose material) with a circular brush and a blower or with air pressure
- The items to be fastened must be clean
- In case the anchor is set in a hollow brick, introduce the sleeve of suitable dimensions (for brick: sleeve 16 mm x 85 mm, and for concrete block: sleeve 16 mm x 130 mm)
- In the case of a solid base material, inject the product from the base of the hole until 2/3 full
- Insert the element to be fastened rotating, if necessary, keep the position with a suitable device
- Unscrew the mixing nozzle and replace the cap

8 - Remarks & Restrictions

- Material removed from its original container can be contaminated during usage which affects both adhesive performance and storage life. Therefore, do not return contaminated product to the original container.
- Akfix cannot take any responsibility for product which has been contaminated or stored under conditions different than previously indicated.
- This guaranteed anchor is not meant to be used as a cosmetic or ornamental product.
- Anchoring into porous or reconstituted stone it is suggested that technical help is sought.
- Migration of the monomer within the resin might cause staining in certain materials. If you are still uncertain, it is better to check the resin by applying it in an exceedingly small, separate area and testing before using.

9 - Safety

Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Store in a well-ventilated place. Keep cool. Check MSDS guidelines for disposal and further information concerning safety.

10 - Disclaimer

The technical data contained herein is based on our present knowledge and experience and we cannot be held liable for any errors, inaccuracies, omissions or editorial failings that result from technological changes or research between the date of issue of this document and the date the product is acquired. Before using the product, the user should carry out any necessary tests in order to ensure that the product is suitable for the intended application. Moreover, all users should contact the seller or the manufacturer of the product for additional technical information concerning its use if they think that the information in their possession needs to be clarified in any way, whether for normal use or a specific application of our product. Our guarantee applies within the context of the statutory regulations and provisions in force, current professional standards and in accordance with the stipulations set out in our general sales conditions. The information detailed in the present technical data sheet is given by way of indication and is not exhaustive. The same applies to any information provided verbally by telephone to any prospective or existing customer.