

Technical Data Sheet

Epoxy-4114

(Epoxy Anchoring Adhesive)

Product description.

This product is a two-component epoxy adhesive with the properties of non-shrinking and filling to fix rebar in concrete. This two-component adhesive can be mixed well and dries at room temperature, and is suitable for use with its extraordinary properties. are the following.

Application areas

Anchoring

Fastening

Restoration and Strengthening Systems for Concrete and Masonr

Advantages

Simple mix ratio 1: 1

Thixotropic tissue, which combines easily

No falling on vertical surfaces

Quick setup

Adhesion and curing in adverse conditions (cold and wet)

Maintain good strength after prolonged immersion in water

Superior tensile and compressive strength of concrete

Very good chemical resistance



Typical Properties

	Part A	Part B
Appearance	Thixotropic paste	Thixotropic paste
Colour	white	cream
Density (g/cm ³)	1.54	1.54

Pretreatment

The strength and durability of a bonded joint are dependent on proper treatment of the surfaces to be bonded. At the very least, joint surfaces should be cleaned with a good degreasing agent such as acetone, isopropanol (for plastics) or other proprietary degreasing agents in order to remove all traces of oil, grease and dirt. Low-grade alcohol, gasoline, or paint thinners should never be used. The strongest and most durable joints are obtained by either mechanically abrading or chemically etching the degreased surfaces. Abrading should be followed by a second degreasing treatment.

Processing Data

Mixing Ratio:	1 part resin to 1 part hardener by volume
Mixing:	Mix until uniform grey or white
Working life at 25°C:	45 minutes
Minimum Application Temperature:	10°C
Minimum Cure Time:	12 hours at 25°C
Full Cure Time:	4 days at 25°C

important information

It is necessary to use the volume ratio equal to the first and second components when mixing. If you do not pay attention to these ratios, there is a possibility of reducing the physical properties of the mixture after baking. There is a time effect.

Equipment maintenance

All tools should be cleaned with hot soapy water before the adhesive residue dries. Removing cooked debris is a difficult and time consuming operation. If solvents such as acetone are used for cleaning, staff should take appropriate precautions and, in addition, avoid skin and eye contact.



Installation Information and Additional Data for Threaded Rod and Rebar

Rebar

Rebar diameter(da)(mm)	8	10	12	14	16	18	20	25	28	30	32	36	40
Hole diameter(do)(mm)	12	14	16	18	20	22	25	30	32	35	40	48	56
Minimum hole depth(hef)(mm)	90	100	120	140	160	180	200	250	280	300	320	400	440
Minimum concrete thickness(h)(mm)	120	140	160	180	200	210	250	300	330	350	380	430	470
Amount of adhesive required for each cavity(gr)	13	16	22	30	40	50	76	90	120	160	300	650	1200

Rod

Anchor size(da)(mm)	M8	M10	M12	M16	M20	M24
Hole diameter(do)(mm)	12	14	16	20	25	30
Minimum hole depth(hef)(mm)	80	100	110	125	170	210
Minimum concrete thickness(h)(mm)	120	130	140	160	210	260
Amount of adhesive required for each cavity(gr)	10	15	20	28	60	90



Typical Physical Properties

Property	value	test method
compressive strength	73 mpa	ASTM D695
Tensile strength	25 mpa	ASTM D638
flexural strength	32 mpa	ASTM D790

health and safety

The adhesive should be stored in closed containers at a temperature of 25 degrees.

After using the material, close the lid of the remaining material tightly.

Before using the material on the surface, make sure that there is no dust, damp or moisture on the surface.

Before using the material, clean the surface from any grease and dirt.

Wear industrial gloves and a mask when using materials.

