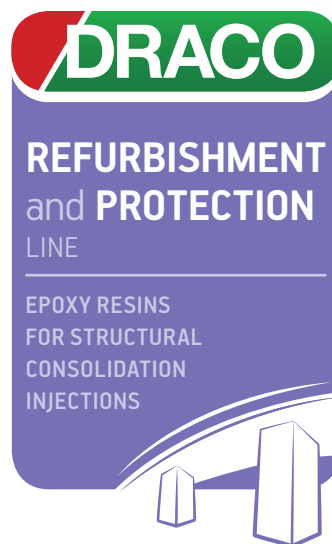


EPOX INIEZIONE R.M.2

TWO-COMPONENT STRUCTURAL FLUID EPOXY RESIN
FOR CONSOLIDATION INJECTIONS AND REPAIRS BY POURING



EPOX INIEZIONE R.M.2 is a two-component structural epoxy resin with low viscosity for reinforcement injections repairing hairline cracks and structural damages. **EPOX INIEZIONE R.M.2** is used for structural reinforcement of concrete, brick, sandstone, stone materials and construction materials, even if they show low porosity.

EPOX INIEZIONE R.M.2 must be injected at low pressure and is effective even at low temperatures. Its fluidity and adhesion to both standard and damp substrates make it also ideal for repairing structures by pouring on concrete.

BENEFITS

EPOX INIEZIONE R.M.2 is a fluid structural epoxy resin ideal for injections.
Specific product features:

- ✓ **FLUIDITY AND HIGH INJECTION EFFICACY:** **EPOX INIEZIONE R.M.2** has fluid consistency, low viscosity and penetrates effectively even in compact materials and micro-cavities.
- ✓ **IT IS NOT ADVERSELY AFFECTED BY DAMPNESS:** **EPOX INIEZIONE R.M.2** is not affected by the presence of dampness both during application and operation, even if it is high.
- ✓ **HIGH MECHANICAL STRENGTH:** **EPOX INIEZIONE R.M.2** develops high mechanical strength and provides structural bonding.
- ✓ **CHEMICAL RESISTANCE:** **EPOX INIEZIONE R.M.2** exhibits superior resistance to water, salts and aggressive solutions.
- ✓ **APPLICATION EVEN AT LOW TEMPERATURES:** **EPOX INIEZIONE R.M.2** may be used at environmental and substrate temperatures up to +5 °C.

IDEAL FOR

EPOX INIEZIONE R.M.2 is a two-component epoxy resin for injection ideal for:

- ✓ Structural reinforcement and monolithic restoration of pillars, beams, floor slabs and cracked concrete elements;
- ✓ Impregnation of concrete, brick, sandstone, and all stone materials in general, even if they show low porosity;
- ✓ Restoration of the structure's monolithic nature by injecting and filling micro-cracks and structural damages both superficial and deep, even in the presence of water;
- ✓ Creation of insulating barriers to prevent rising damp in buildings while providing structural reinforcement.
- ✓ Waterproofing restoration of cracked reservoirs and containment tanks.



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HOW TO USE

SUBSTRATE CLEANING

Remove all loose and crumbling parts from the area to be restored by sandblasting or brushing taking care not to damage the structures. Remove stains, residues of oil, grease, paint, dirt, etc.

For impregnation and repairing of fissures and cracks. On horizontal surfaces, **EPOX INIEZIONE R.M.2** can be applied by pouring.

SEALING OF CRACKS BY INJECTION

If structural restoration is needed, It will be necessary to make repeated injections at low pressure. The operating cycle is as follows:

positioning of STARJET BC injectors

Depending on the extent and depth of the damage, evaluate the position and number of injection spouts and place them in the cracks: usually, they are applied 10-20 cm apart from each other. Seal the crack and fix the injectors tubes with EP FIX epoxy paste. Use fix flat head injectors.

In case of small cracks, loose parts or non-visible damages, make a series of holes of 8-9 mm diameter evenly distributed according to the size of the crack, and bore the. Thoroughly clean surfaces from dust with compressed air and insert the injection tubes into the holes by fixing them with EP FIXES epoxy adhesive and seal the crack.



PRODUCT PREPARATION

The two components of **EPOX INIEZIONE R.M.2** are provided in two separate packages:

- ▶ A - base formulation
- ▶ B - hardener

Mix component A (base) and B (hardener) each in its own container before joining the two components. Do not use partial quantities: a wrong mixing ratio could cause damage during the hardening process. Pour component B in a suitable container and then add component A. Mix for a few minutes using a low-speed mechanical stirrer to avoid dragging air into the mix till getting a well-blended and uniformly coloured mix. Workability time may vary depending on the amount of mixed product, the thermo-hygrometric environmental conditions and the substrate temperature: higher temperatures or large amounts of product will reduce the time.

APPLICATION BY INJECTION UNDER PRESSURE

Wait for the curing of EP FIX epoxy paste (about 24 hours at 20°C) and inject compressed air to verify that

the internal voids are communicating. In this way the resin will be uniformly spread. Start the injection of **EPOX INIEZIONE R.M.2** with a suitable low-pressure pump to avoid that the rapid hardening of the material impedes proper application (workability: about 25 minutes at 25°C). Start from the lowest spout and inject until the resin overflows out of the next injector. Now stop injecting and close the access spout and inject the product in the next injector positioned just above. Proceed by repeating this operation from bottom to top until the crack is completely sealed.

EPOX INIEZIONE R.M.2 can be used as structural adhesive even in the presence of water. In this kind of interventions it is particularly important that the resin, which has a specific gravity greater than that of water, is injected in such a way as to progressively remove the latter from the crack, thus allowing contact between the resin and the two walls to be "welded".

SAFETY INSTRUCTIONS

- ▶ Use rubber gloves and safety glasses while applying and cleaning tools.
- ▶ Do not apply on dirty or crumbly surfaces.
- ▶ Product for professional use.

EPOX INIEZIONE R.M.2



PACKAGING AND STORAGE

EPOX INIEZIONE R.M.2 is available in:

- 1 kg +0.5 kg pails = (A + B) 1.5 kg
- 5 kg +2.5 kg pails = (A + B) 7.5 kg

If the product is stored properly in its original packaging, at a temperature of not less than + 10° C, it maintains its original features for one year.



PRODUCT FEATURES

CONSISTENCY AND COLOUR

Comp. A: clear liquid
Comp. B: clear liquid

STORAGE

12 months

APPLICATION DATA APPLICATIVE

MIXING RATIO

A:B = 1:0.5

APPEARANCE AND COLOUR

Transparent fluid

SPECIFIC GRAVITY (A+B) AT 20°C

1.1 kg/l ca.

DRY SOLID CONTENT

100%

VISCOSITY (25°C)

450÷550 mPa·s

WORKABILITY

approx. 70 minutes (+10°C)
approx. 25 minutes (+25°C)
approx. 10 minutes (+30°C)

WORKABILITY OF POURABLE RESINS - Gutter UNI EN 13395-2

70 cm

STIFFENING TIME UNI EN 13294

I=50' F=60'

TOTAL CURE TIME (25°C)

7 days

APPLICATION TEMPERATURE RANGE

from +5°C to +30°C

CONSUMPTION

approx. 1.1 kg per dm³ of the cavity to be filled

ACCESSORIES

STARJET BC

PLASTIC SPOUTS FOR CONSOLIDATION BY INJECTION WITH EPOX INIEZIONE R.M.2 AND R.M.3 RESINS

Spouts and plastic caps for injections into concrete using the structural epoxy resins EPOX INIEZIONE R.M.2 and EPOX INIEZIONE R.M.3. The shape ensures rapid and secure application. Suitable for standard pressure (< 3 bar).

DIAMETER: 5 mm. PACKAGING: 50 pcs.



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PERFORMANCE CHARACTERISTICS UNI EN 1504-5 AND 1504-6

CHARACTERISTICS	TEST METHOD	REQUIREMENTS IN ACCORDANCE WITH EN-1504-6	PRODUCT PERFORMANCE	
COMPRESSIVE STRENGTH	UNI EN 12190	> 80% of manufacturer's declared value	>70 MPa	
PULL OUT RESISTANCE OF STEEL RODS	UNI EN 1881	≤ 0,6	U = 0,1mm A = 0,1mm	
GLASS TRANSITION TEMPERATURES	UNI EN 12614	≥ +45°C	50°C	
CHARACTERISTICS	TEST METHOD	REQUIREMENTS IN ACCORDANCE WITH EN-1504-5	PRODUCT PERFORMANCE	
BOND DUE TO TENSILE STRENGTH	EN 12618-2	cohesive failure of substrate	meets specifications cohesive failure "type A" cls MC 0,45	
BOND DUE TO INCLINED SHEAR STRENGTH	EN 12618-3	monolithic failure	meets specifications	
INJECTION INTO A COLUMN OF DRY SAND AND INTO A COLUMN OF DAMP SAND	EN 1771	injection class:	dry	damp
		– cracks width da 0,1 mm: < 4 min – cracks from 0,2 e 0,3 mm: < 8 min	3 min e 10 s	3 min e 10 s
OTHER CHARACTERISTICS				
MODULUS OF ELASTICITY	ISO 178	-	3.000 MPa ca.	
FLEXURAL STRENGTH	EN 196	-	45 MPa	

Legal notice - SLCMP version dated 01.03.2017

In the technical specifications herein, Draco Italiana s.p.a. used the indicators therein specified, with the relevant standards.

Please check if this Sheet and the figures therein contained apply to the product batch you are interested in or if they have been overridden by any later release. If in doubt, check whether this Sheet matches the one applicable at the time of finalising the sales agreement, at www.draco-edilizia.it, and/or contact our Engineering Department.

No advice provided by our staff, either verbally or in writing at your request, about the potential applications of the Products shall be binding under the sales agreement or shall be considered an integral part of the agreement. Such advice is based on our experience and on the best available practical and/or scientific knowledge; as such, it shall not be binding or conditional on the buyer or user. Please try our products first to find out whether they are fit for your intended use or application; in any case, you shall be solely responsible for your choice.