



# MAXFIX® -P

## POLYESTER-BASED ANCHORING RESIN FOR METAL ELEMENTS, THREADED RODS AND REBARS INTO CONCRETE AND SOLID OR HOLLOW MASONRY

### DESCRIPTION

**MAXFIX® -P** is a two component, polyester-based resin which is packed in two-part biaxial type cartridge. It is specially designed for use by injection means. It is suitable for any solid or hollow base materials. Applications can be made easy and quick way by a hand gun.

### APPLICATIONS

- Anchoring of rebars and threaded rods to:
  - Structural concrete, light concrete, etc.
  - Hollow or solid bricks
  - Natural or artificial stone.
  - Concrete blocks, pre-cast elements, etc.

### ADVANTAGES

- Packed resin into injection cartridge for use directly with hand gun.
- Easy and handy application, it does not require a premixing.
- Quick job-place for anchored objects.
- Its good thixotropy allows the application on wall and ceiling.
- It is suitable for fastening on common materials used in construction: concrete, stone, masonry, hollow brick, solid brick, wood, etc.
- It does not produce any expansion strain into base material.
- It allows short distances from edges and anchor spacing.
- A cartridge can be used for many times.
- Suitable product for anchoring of element in hollow substrates.

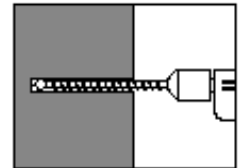
### APPLICATION INSTRUCTIONS

#### Surface preparation

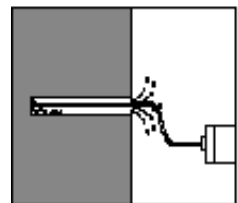
Make sure that base material is sound and is not deteriorated.

Drill a hole into base material with a rotary electric or pneumatic hammer drill. According to the

characteristics of the anchored object, the hole should have the suitable diameter and depth (see Tables 1 and 2).

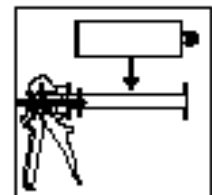


For removing the dust, clean the hole by brushes and blowing-out devices. Make sure that threaded rods or rebars are free of any contaminants, oils, greases, dust, etc.

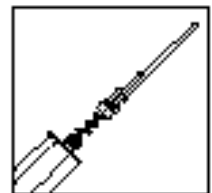


#### Procedure for the injection system

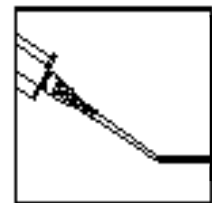
Pressing the release lever and then, pull back the piston of the hand gun. Unscrew the protection top and insert the cartridge into the hand gun.



Before screwing the mixing nozzle, make sure that both component A and component B are coming out accurately from the cartridge. Finally, screw the mixing nozzle.



In order to get a suitable mixing, squeeze out resin until the product becomes uniform in colour. A couple of trigger pulls could be necessary (5 cm). Once all these steps have been done, system is ready for use. Proceed in the same way for each change in the mixing nozzle.



**Table 1. Anchor data in solid material**

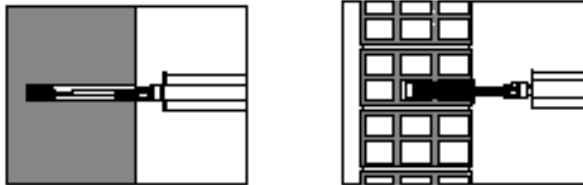
Threaded rods / Rebars	8	10	12	16	20
Hole diameter (mm)	10	12	14	20	25
Standard hole depth (mm)	80	100	120	160	200

**Table 2. Anchor data in hollow materials**

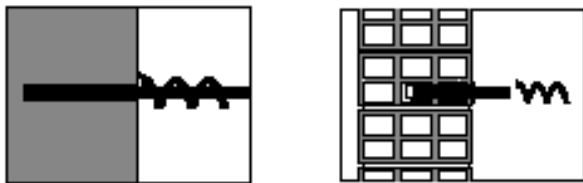
Threaded rods	M8	M10	M12
Plastic sleeve diameter (mm)	16	16	16
Hole diameter (mm)	16	16	16
Standard hole depth (mm)	95	95	95

**Application**

Inject **MAXFIX® -P** into the hole for solid materials, or into the plastic sleeve previously placed for hollow materials. Make sure, insert the mixing nozzle at the end of the hole. As hole is full of resin the hand gun should be removed.



In order to get a good impregnation of the anchors, threaded rods or rebars with vinyl ester-based resin into the hole, a light twisting motion should be done while those are placed. Make sure that metal objects are free of grease, rust and dust. Before loading the threaded rods/rebar, wait the curing time.



**Application Conditions**

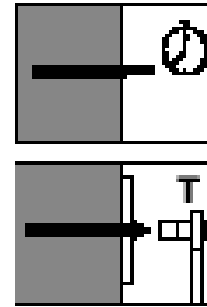
During application, both the **MAXFIX® -P** cartridge and the base material should be in the temperature range from +5 °C to +30 °C.

**Curing**

The curing time depends on application temperature. In this way, high temperatures speed up the reaction while low temperatures slow down the process. Before applying the torque tight on the fastening, the curing time must be observed. The pot life matches with the initial curing time in which the resin has not still begun to harden, allowing rectifications (working time in which anchors or rods can be inserted and adjusted). In order to harden completely, resin employs the curing time.

**Table 3. Curing Time**

Substrate temperature (°C)	Pot life (min)	Curing time (min)
5	14	180
10	12	150
15	10	100
20	8	60
30	4	30



**Cleaning**

Before pot life finishes, all tools and equipments should be cleaned with a duster. Once **MAXFIX® -P** hardens, it can only be removed by mechanical means.

**CONSUMPTION**

Depending on the metrics and depth, a large number of anchors can be done with a **MAXFIX® -P** cartridge of 410 ml.

**Hollow base material**

15-20 anchors per 410 ml cartridge

**Solid base material**

Number of anchors = 410 / V

$$V = 0,41 * d^2 * h$$

d= Drill diameter (cm)  
h= Drill thickness (cm)

**PACKAGING**

Two-part biaxial type cartridge of 410 ml.

**STORAGE**

Twelve months in its original unopened packaging. It should be stored in a dry, fresh and covered place, protected from direct sun light. Temperature range for storage should be from 5 °C to 30 °C.

**IMPORTANT INDICATIONS**

- If resin cures into the mixing nozzle, a new one must be used for more applications.
- Technical data are from numerous laboratory tests on common materials. If in doubt about base material, some previous tests should be done. These tests will indicate the suitability for the system.
- Follow the instructions given herein for correct applications. If in doubt or any other further information, consult the Technical Department.

## SAFETY AND HEALTH

Polyester-based resin can irritate to skin, so that protective rubber gloves and goggles must be used to handle and apply the resin. In case of skin contact, wash affected areas with soap and water, but do not rub. If irritation continues, seek medical attention. In case of eye contact, rinse thoroughly with clean water for at least 15 min, but do not rub and seek medical attention. In case of inhalation,

supply fresh air.

For further information, Safety Data Sheet of **MAXFIX® -P** is available.

Disposal of the product and its empty containers must be made according to official regulations. This disposal must be made by the final user.

**TECNICAL DATA**

<b>Table 4. Recommended loads of the anchors</b>					
<b>Base material: Uncracked concrete HA-25 (C20/25)</b>					
<b>Threaded rods-Quality 5.8 Rebars</b>	<b>M8</b>	<b>M10</b>	<b>M12</b>	<b>M16</b>	<b>M20</b>
Hole diameter (mm)	10	12	14	20	25
Standard hole depth (mm)	90	100	120	160	200
<b>Recommended load* (<math>F_{rec}</math>)</b>					
N <sub>rec</sub> : Tensile (kN)	5,6	8,8	12,3	18,0	24,0
V <sub>rec</sub> : Shear (kN)	5,2	8,0	12,0	21,7	30,5

\* Data for a fastening in the centre of a base material without influence factors such as edges and the distance between anchors.

**GUARANTEE**

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®**, **S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.


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