



Product with the European conformity mark **CE**

PRODUCT N^o. : 3.118

TECMADRY[®] ELAST

Cement based *elastic* coating for high protection and waterproofing

DESCRIPTION:

TECMADRY[®] ELAST is a two-part pre-packaged product which is based on special cements and synthetic resins in emulsion. **TECMADRY ELAST** produces effective waterproofing, preventing water ingress in positive water pressure conditions. Furthermore, it's high flexibility allows bridging cracks due to settling, thermal expansion, etc., maintaining its waterproofing and protection qualities. **Tecmadry Elast** allows the natural "breathing" of the substrate.

FIELD OF APPLICATION

TECMADRY[®] ELAST is especially recommended:

- When waterproofing and protecting surfaces with cracks, or which could be subject to movement. Due to its high weather resistance and its great finish it can be left as it is, achieving the aesthetic and decorative properties of other professional finishes.
- When protecting or waterproofing civil works: tunnels, watering channels, silos, beams and pillars in bridges, dams, water treatment plants, etc.
- For waterproofing and protecting basements and foundations, tunnels, walls, etc., always working with direct pressure.
- For waterproofing and protecting salt water tanks.
- Protecting structural concrete against carbonation, due to its high resistance to carbon dioxide diffusion.
- When protecting structural concrete against corrosion due to chloride attack, especially in aggressive environments (coastal areas, etc.) due to its high resistance to chloride penetration.
- When protecting concrete against aggressive environments: sulphated waters, saltwater, polluted environments, etc., due to its high resistance to pollutant gases and ions.
- When protecting concrete against freeze/thaw cycles.

ADVANTAGES/USES:

- Waterproofing coating
- High flexibility (bridges cracks)
- CO₂ tight but permeable to water vapour.
- Excellent adherence on different types of surfaces.
- Resistant to aggressive environments: salt water, sulphated waters, polluted environments, etc.
- High protection against carbonatation and chloride penetration, as well as other pollutant gases and ions which can reduce the durability of structural concrete.
- Resistant to freeze/thaw cycles.
- Easy to use
- Non-toxic, chloride free and creates no powder

SURFACE CONDITIONING:

The surface to be treated should be firm and free from grease, oil, paint and/or cleaning agent residue, grout, loose materials, sand, dust or any other pollutants. It's recommended to properly prepare the surface preferably by mechanical means (sand blasting, strong brushing, etc.) Should the surfaces be too smooth and/or of little porosity, they must also be treated by mechanical means in order to provide sufficient roughness and porosity. Efflorescence and mineral salts should be removed before applying **TECMADRY ELAST**. Damaged areas must first be repaired with **PREMHOR**.

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METHOD OF USE:

TECMADRY® ELAST is supplied in the appropriate proportions of both components. In order to mix properly, it's recommended to first mix the entire powder product with 60% of the liquid component and stir until getting a uniform mixture free from lumps. Add the rest of the liquid little by little and stir at low speed in order to prevent air being introduced. Let the product rest for about 5 minutes, mixing shortly afterwards. Once the mixture is prepared, it has an effective life of approximately 30 – 60 minutes, depending on the temperature and relative humidity. It's possible to add up to **2% water maximum** to the paste in order to reduce viscosity of the application (in hot weather) without affecting its properties.

APPLICATION

It's recommended to apply at least two coats, with an approximate amount of 1-1.2 kg/m², leaving a period of 12 – 24 hours between coats. When applying, follow the steps as below:

- Damp the surface by spraying it with clean water.
- Apply a first coat of **TECMADRY® ELAST** over the whole surface with a special short haired brush or roller. When applying on smooth surfaces, it's possible to use a trowel.
- Let the coat dry for about 12-24 hours depending on the weather conditions.
- Damp this first coat and apply a second coat of **TECMADRY® ELAST** to the first one, thus assuring total coverage, leaving to dry again.
- Follow the same steps if applying a third coat.
- Allow about 7-14 days before filling with water, depending on the weather conditions.
- For tanks which are going to be used for drinking water, rinse several times with water before finally filling.

Tools should be cleaned with water before the product dries.

The product must be applied in temperatures between +5 and 30 °C, protecting the application against very rapid drying, especially when the surface will be exposed to strong winds or bright sunlight. Also protect from rain and frost.

SPECIAL RECOMMENDATIONS

- Do not apply with temperatures below 5 °C or when frost is expected during the 24 hours after application
- Do not apply on frozen or frost coated surfaces.
- Do not damp the wall excessively when temperature is low, and never below 5°C.
- Do not apply on gypsum, paint or lime.
- Allow to cure for at least 7-14 days (depending on the temperature and relative humidity) before filling with water.
- For tanks which are going to be used for drinking water, rinse several times with water before finally filling.

The product allows for subsequent applications of flexible cement based products or products recommended for non-absorbent surfaces although it's recommended to make a prior test.

CONTRAINDICATIONS

Do not apply the product in negative water pressure conditions.

Do not apply solvent-based coatings on **TECMADRY ELAST** (i.e. chlorinated rubber-based paint for swimming pools)

COVERAGE

For effective waterproofing, the recommended coverage is about 1.0 -1.2 kg/m² for each coat. A minimum of 2 coats is recommended.

COLOURS:

TECMADRY® ELAST is supplied in grey, white and blue

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CERTIFICATIONS:

Product with the European conformity brand **CE**: product complying with the European standard **EN 1504-2** and **Directive 89/106/CEE re construction products**.

TECMADRY® ELAST is recommended for use in contact with drinking water according to **Migration Report Nº 6063** by the Official Laboratory Joaquín Riera Tuebols (O.T.E.C.).

TECHNICAL DATA:

<i>Powder apparent density</i>	1,20 g/cm ³
<i>Liquid apparent density (EN ISO 2811-1)</i>	1,04 g/cm ³
<i>Particle size distribution (EN 12192-1)</i>	0 – 0,6 mm
<i>Pot life</i>	30 minutes
<i>Application temperature</i>	+5 °C up to +30 °C
<i>True specific density of fresh mortar (EN 1015-6)</i>	1540 kg/m ³
<i>Surface drying time (EN ISO 1517)</i>	< 3 hours
<i>Elongation until breaking (UNE EN 527/3) (28 days)</i>	140%
<i>CO₂ permeability (EN 1062-6) (Equivalent air barrier)</i>	S _D > 400 metres
<i>Water vapour permeability (EN ISO 7783-1/-2) (Equivalent air barrier)</i>	S _D < 5 metres Class I (EN 1504-2) Water vapour permeable < 0,1 kg/ m ² .h ^{0,5}
<i>Water permeability (EN 1062-3)</i>	Non-permeable to water (EN 1504-2)
<i>Bond strength on concrete support (UNE-EN 1542:2000) (28 days)</i>	1,15 MPa (Product cohesive breakage)
<i>Bond strength on ceramics support (UNE-EN 1542:2000) (28 days)</i>	1,10 MPa (Product cohesive breakage)
<i>Bond strength on concrete support (UNE-EN 1542:2000) (6 months)</i>	1,37 MPa (Product cohesive breakage)
<i>Bond strength on ceramics support (UNE-EN 1542:2000) (6 months)</i>	1,30 MPa (Support cohesive breakage)
<i>Hazardous substances (EN 1504-2)</i>	According to En 1504-2, section 5.3
<i>Penetration depth of water under pressure (direct pressure) (UNE-EN 12390-8:2001) (5 kg/cm² – 72 hours)</i>	0 mm (no water penetration)
<i>Penetration depth of water pressure (counterpressure) (UNE 83309/90) (1,3 and 7 kg/cm² – 96 hours)</i>	0 mm (no water penetration)
<i>Water absorption of the coating after 24 hours immersion (on 2 mm thick specimens)</i>	1,78%
<i>Capability to be used in contact with water for human consumption (Migration test report nº 6063 – O.T.E.C.)</i>	Suitable

PACKAGING AND STORAGE

TECMADRY® ELAST is supplied in 30 kg pre-packaged sets (20 kg powder component and 10 kg liquid component).

TECMADRY® ELAST must be kept in tightly closed original containers. Storage life in original containers is 12 months.

TECMADRY® is a trade mark owned by Industrias Químicas Satecma®S.A.

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