



# MAXSEAL®

## WATERPROOF COATING FOR CONCRETE AND MASONRY



## DESCRIPTION

**MAXSEAL** is a cement based mortar with special additives which along with controlled aggregates, once cured, it becomes a waterproof coating suitable for using on concrete, brick, concrete block, mortar render and masonry substrates.

## APPLICATION FIELDS

- As a waterproofing and coating of drinkable water reservoirs.
- Waterproofing of swimming-pools.
- Waterproofing of tunnels, galleries, basements and elevator pits with water pressure.
- Protection and waterproofing of concrete in water treatment plants, separating tanks, etc.
- As coating for waterproofing panels in dams and retaining walls.
- Waterproof coating for façades and wall faces, concrete blocks and prefabricated panels.
- Restoration and waterproofing of channels.
- As a waterproofing and protection of concrete against aggressive water in foundations.
- Waterproofing and decorative finish for silos and refrigeration towers in thermal power plants.

## ADVANTAGES

- Excellent impermeability. Withstands positive hydrostatic pressures as well as negative ones.
- Allows being set on wet substrates.
- Perspires, and allows substrate to do this function in order to eliminate the water vapour contained.
- Final layer of **MAXSEAL** might work as a decorative finish, saving further enhancing paint costs.
- Easy to apply and maintenance cost is hardly noticeable.

- Resistant in aggressive environment like in sea-coasts and atmospheric pollution zones.
- High durability, beyond any other sort of paint or coating.
- Excellent adherence to substrate. It fits in structurally to substrate, filling and sealing porous.
- Suitable for uses in contact to drinkable water.
- Once cured, it can be painted or coated with protection mortars or decorative finished, like **CONCRESEAL PLASTERING**. It also allows being covered with tiles or gresite lining, such as in cases of waterproofing of swimming-pool, decorative ceramic murals, kitchens and bathrooms.

## HOW TO USE

### Surface preparation

Surface to be treated should be clean and sound, free of paint, efflorescence, grease, oils, demoulding agents, dust, gypsum, etc. If surface had been temper or painted with lime, acrylics or stony treatments, etc, the best part of it must be removed (80%), leaving hard tight traces only.

All cracks must be deeply opened up (1,5 cm at least), and sealed with **MAXREST**, if there are water leaks; they must be sealed with **MAXPLUG**.

Superficial non-structural bars must be deeply cut (2 cm at least), being coated with **MAXREST** or **MAXPLUG** after.

Surface must be dampened until saturation avoiding making puddles, before applying **MAXSEAL**. Do not apply onto gypsum substrates.

### Mixing

Pour out in an appropriate bucket one part of **MAXCRYL** and three parts of clean water and use the ensuing liquid for mixing **MAXSEAL**. Add **MAXSEAL** to the liquid, bit by bit, mixing it preferably by a low speed mixing drill 1 to 2 minutes approximately, until achieving a creamy thick paste without clots. Then allow it to rest for 5 minutes. Mix briefly once again and begin the application. One 25 kg bag or pail needs from 6,25 to litres preferably of **MAXCRYL**.



water solution or just by water when surface conditions and temperature are very best for **MAXSEAL** application (surfaces with certain porosity and absorption ability and temperature between 15 and 20 degrees).

## Application

**MAXSEAL** is applied by fibre brush, type **MAXBRUSH** or by nylon fibre broom, type **MAXBROOM**, in order to ease its penetration in porous and voids.

Apply in thick layer making up an even and continuous coating, combing in one direction, do not spread like paint, second layer must be applied in the perpendicular direction of the first one. Second layer allows its application and finish also by roller.

If surface is going to be rendered or veneered, it is advisable to apply second layer horizontally to ease further application and minimize delaminating. For water piping, second layer must be combed in water direction in order to ease the evacuation. Once **MAXSEAL** is spreaded and set, must not be brushed again.

**MAXSEAL** can be applied also mechanical by spraying, being advantageous, brushing at least first layer in order to improve penetration of the product and assure homogeneous spreading and complete coverage of surface.

## Application temperature.

The very best temperature for applying **MAXSEAL** is from 15 °C to 20 °C.

Avoid any outdoor application when rain is forecast within 4-6 h after applying.

With strong wind or summer temperatures, dampen plentifully the surface and use **MAXCRYL** for mixing **MAXSEAL**. Protect the application against direct exposure to those conditions.

Later watering after applying **MAXSEAL** are allowed if quick drying of product is appreciated, without washing the surface.

In winter do not apply it below 5 °C or if lower temperatures are forecast within 24 hours after application. Do not apply on frozen or frosted surfaces.

## Curing

Allow **MAXSEAL** to cure at least for 7 days at 20 °C and 50% of relative humidity before submitting to permanent immersion. Lower temperatures and higher humidity ratio increase curing time.

## Tools cleaning

Every tool must be cleaned right away water after being used. Once material becomes hard can only be removed by mechanical methods.

## CONSUMPTION

It is applied in two layers, from 1 kg/m<sup>2</sup> to 2 kg/m<sup>2</sup> the first one, depending on waterproofing level wanted and 1 kg/m<sup>2</sup> the second one.

## PACKAGING

**MAXSEAL** is supplied in 25 kg bags, 25 and 5 kg pails. Colour: Standard grey, white and pearl grey. It can be supplied in different light colours, **MAXSEAL DECOR** under range request, depending on quantity.

## STORAGE

Bags, in dry place one year, in drums for 18 to months.

## IMPORTANT INDICATIONS

- Do not use onto gypsum plaster surfaces.
- Do not add to **MAXSEAL** cements, additives or aggregates, which could damage product properties.
- Do not use pure water for mixing. In case of water with sulphides use **MAXSEAL ANTISULFAT**.
- In case of doubt about **MAXSEAL**, mixing water suitability or for any other further information, we beg to ask our Technical Department.

## SAFETY AND HEALTH

As all cement products, **MAXSEAL** is abrasive and protective rubber gloves must be used to prepare the mixture gets into the eyes, rinse thoroughly with clean water, but do not rub. If irritation continues, consult a doctor. For further information, consult the Safety Data Sheet or this product.

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO** reserves the right to introduce changes without prior price. 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. For any other doubt, we beg to ask our Technical Department. This version of bulletin replaces the previous one.

## TECHNICAL DATA

### Permeability to water under pressure negative conditions

After 180 mins. from 3,5 kp/cm<sup>2</sup> pressure was applied, there was no passage of water though **MAXSEAL** - lined surface. Test was interrupted by breaking of test-pieces.  
Test nº 14.943 I.E.T.C.C. (1)

### Toxicity

**MAXSEAL** is suitable as internal lining from drinking water tanks. It is not toxic.  
Test nº 14.343 I.E.T.C.C. and Analysis No. 44.643 from National Food and Nutrition Centre.  
Ministry of health and Consumer.  
Test nº 5.211-5.212 de Lebensmittel-Versuchsanstalt, Viena (Austria).

### Permeability to rain water

A water flow, 120 l/m<sup>2</sup> · h, with wind, is applied on the surface of **MAXSEAL** - lined wall. After 4 hours of testing, no water or dampness is seen to seep trough the wall.  
Test nº 1.031/82-M INCE(2)

### Permeability to steam

**MAXSEAL** allows the substrate on which it is applied to breathe.  
Test nº 15.816 I.E.T.C.C.(1)

### Accelerated ageing. Freeze. Thaw and heat-ice cycles

After 1000 hours of testing, there was no deterioration, loss adhesion, cracking or colour changes.  
Test nº 15.269 I.E.T.C.C.

### Adhesion

Perpendicular traction pull off test: 24,7 kp/cm<sup>2</sup>  
Test No. 200115825VA. SAIN C.V.O.- S.A. Laboratory.

### Mechanical Resistances

Age	N/mm <sup>2</sup>	
	Flexural Strength	Compression Strength
7 days	4,90	33,0
28 days	7,55	40,7

Test nº 200115157VA. SAIN C.V.O. -S.A. Laboratory

(1) I.E.T.C.C.

Eduardo Torroja Institute for the Construction and Cement. Member of European Union for Construction Technical Agreement.

(2) I.N.C.E.: National Institute for Quality in Construction.



### DRIZORO, S.A.

C/ Primavera 50-52. Parque Industrial Las Monjas  
28850 TORREJÓN DE ARDOZ – MADRID (SPAIN)  
Tel. (+34) 91 676 66 76 ; (+34) 91 677 61 75 ; Fax. (+34) 91 675 78 13  
e-mail: info@drizoro.com Web Site: drizoro.com

