



MAXSEAL[®] SUPER



CEMENT- BASED WATERPROOF COATING WITH CRYSTALLISATION AND OSMOTIC PROPERTIES



DESCRIPTION

MAXSEAL[®] SUPER is a special waterproofing coating made of a mixture of cements, carefully controlled aggregates and special organic and inorganic additives. Its special formula improves the osmotic effect of the application allowing the penetration in the concrete through its capillary system. The product crystallises inside sealing, waterproofing and protecting the concrete structure. It has been designed to be applied on fresh or set concrete, pre-cast concrete, concrete blocks or cement plasters but is also suitable for applications in bricks and masonry.

APPLICATION FIELDS

- Waterproofing and coating drinking water tanks.
- As a waterproof coating for exterior and walls.
- Basements and below-grade structures subjected to positive or negative water pressure.
- Waterproofing and protection of concrete foundations, retaining walls and foundation slabs.

- As a waterproof coating for concrete blocks and prefabricated panels.
- As a decorative, waterproof finish for silos and cooling towers in thermal plants.
- Repairing and waterproofing irrigation channels.
- As a coating to waterproof dams and retaining walls.
- To protect and waterproof concrete in water treatment plants.
- Waterproofing tunnels and shafts.
- Waterproofing swimming pools.

ADVANTAGES

- Suitable for use in contact with drinking water.
- The penetration inside concrete provides internal sealing and protective effect. It seals cracks up to 0,4 mm.
- 100% waterproof coating, even in permanent immersion applications subjected to high pressures.
- For indoor applications, especially basements, the coating resists hydrostatic pressure from groundwater.
- Can be applied on dampened surfaces, being easy to use free of future maintenance costs.
- Resists the corrosive effects of salt water and atmospheric pollution.
- Longer lasting than paints and other coatings.
- Once it sets, can be painted over. It can also be covered with ceramic tiles as in swimming pools or decorative outdoor murals.
- Allows the substrate the water vapour diffusion.

APPLICATION INSTRUCTIONS

Surface preparation

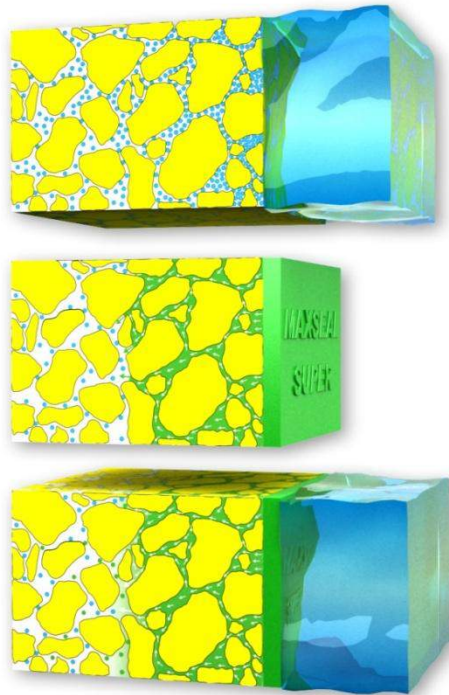
The surface to be coated must be solid and clean, free of all traces of paints, coatings, efflorescence, loose particles, grease, oil, demoulding agents, dust, gypsum plaster, etc. Remove by water pressure cleaning, sand blasting or other suitable mechanical method.

All cracks must be at least 1,5 cm deep and must be sealed with **MAXREST**® if there is no water or with **MAXPLUG**® if there is water penetration. All non-structural surface iron must be cut to a depth of 2 cm and then patched with **MAXREST**® or **MAXPLUG**®.

Wash and saturate the surface with water before applying the coating but check that there are no puddles or free-standing water remaining.

Application by brush, broom or spray

Mix just with water between 6 and 7 litres per each 25 kg bag, either manually or preferably by slow



speed drill (400 – 600 rpm). Applications made at high temperatures or sprayed, the water ratio can be increased slightly.

For standard applications, **MAXSEAL**® **SUPER** can be applied with a fibre type brush or broom such as our **MAXBRUSH**® or **MAXBROOM**®. Apply a thick layer to form a continuous and uniform coating; do not spread as if it were paint, apply only in one direction, the second coat should be spread in the opposite direction. Consumption is between 1 and 1,5 kg/ m² per coat, for a total consumption of about 2 – 2,5 kg/ m². Waiting time between coats is from 6 – 8 hours minimum to 24 hours maximum.

It can be also sprayed by means of a shotcreting equipment. For applications made by spray which will be later subjected to water pressure, and in order to ensure a complete coverage of the surface, it is recommended to slide the broom over the material which has just been sprayed.

Application by dusting and power trowel

For this case, the application is performed on the fresh concrete, after levelling, and has enough strength to be walked over, but still fresh enough to dampen the surface when trowelled. The product is spread in powder form as supplied at a ratio of 1,5 to 2,5 kg/ m², endeavouring to achieve a complete and uniform coverage. Immediately after the surface is hosed down to prevent the superficial drying of the slab and to make the power trowelling smoother. The trowelling will provide a monolithic waterproof layer, which can be slightly dampened during this operation to improve the penetration and to prevent an excessively quick drying, which would prevent the proper hydration of **MAXSEAL**®.

SUPER. Singular spots such as columns, penetrating pipes, corners, concrete joints, and expansion joints should be treated and sealed accordingly.

MAXSEAL® SUPER can also be dusted on the lean concrete and the steel reinforcements. This procedure will not only protect the reinforcement itself but will prevent the rising dampness into the foundation slab.

The lean concrete should be dampened until saturation and **MAXSEAL® SUPER** will be dusted using between 1,5 to 2,5 kg/ m². The concrete of the foundation slab can be poured after one hour, once **MAXSEAL® SUPER** has hardened and adhered to the lean concrete, endeavouring not to damage the previous application.

Application conditions

The ideal working temperature is 15° - 20°C. For summer or hot temperatures, wet the surface with plenty of water. You can water the surface even after **MAXSEAL® SUPER** has been applied if it is noticed that the drying process is too fast.

Do not apply when temperature is below 5°C or if such temperatures are expected within 24 hours of application. Do not apply on frozen or frosted surfaces.

Do not apply on outdoor surfaces if rain is expected within 24 hours after application.

Cleaning

Tools and equipment must be cleaned with water immediately after use. Once **MAXSEAL® SUPER** hardens, only product can be removed by mechanical methods.

CONSUMPTION

Estimated consumption applied by brush, broom or spray is between 1 and 1,5 kg/ m² per coat, for a total consumption of about 2 – 2,5 kg/m² in two coats. Porous surfaces, substrate conditions and application method can vary these estimated consumption.

Applied by dusting on fresh concrete, estimated consumption of **MAXSEAL® SUPER** is about 1,5 – 2,5 kg/ m². Congested reinforced slabs can increase consumption up to 20 - 25 %.



A preliminary test on-site will determine consumption exactly.

PACKAGING AND COLORS

MAXSEAL® SUPER is supplied in 25 kg bags and drums. It is available in grey, pearl grey and white colour.

STORAGE

Twelve months in bags and eighteen months in drums respectively, in its original unopened packaging, in a dry covered place protected from damp and frost, with temperatures above 5 °C.

SAFETY AND HEALTH

MAXSEAL® SUPER is an abrasive compound, so protective rubber gloves and safety goggles must be used to prepare the mixture and apply it. In case of skin contact, wash affected areas with water and soap. In case of eye contact, rinse thoroughly with clean water, but do not rub. If irritation persists, seek medical attention.

For further information, Safety Data Sheet of **MAXSEAL® SUPER** is available by request.

Disposal of the product and its empty packaging must be done by and according to official regulations.

TECHNICAL DATA

Product characteristics	
<i>CE Marking, EN 1504-2</i>	
Description. Mortar for protection of concrete. Coating (C). Principles / Methods. Protection against ingress with coating (Principle 1-PI / 1.3), Moisture control with coating (Principle 2-MC / 2.2) and Increasing resistivity by limiting moisture content with coating (Principle 8-IR / 8.1)	
General appearance and colour	White/Grey powder
Maximum aggregate size, (mm)	0,63
Density for powder, (g/cm ³)	1,15 ± 0,10
Mixing water or mixing liquid, (% by weight)	24-28
Density for fresh mortar, (g/cm ³)	1,85 ± 0,10
Application and curing conditions	
Minimum application temperature for substrate and ambient, (°C)	> 5
Pot life at 20 °C & 50 % R.H., (min)	30 – 40
Minimum / Maximum waiting time between coats at 20 °C & 50 % R.H., (h)	6 – 8 / 12 – 16
Drying time at 20 °C & 50 % R.H., (h)	4 – 6
Curing time at 20 °C & 50 % R.H., (d)	
- Mechanical load: covering with gravel, renders, plasters or tiles	3
- Permanent immersion	7
Cured product characteristics	
Density for cured mortar, (g/cm ³)	1,75 ± 0,10
Depth of penetration of water under direct pressure, EN 12390-8 (kPa)	850
Depth of penetration of water under indirect pressure, EN 12390-8 (kPa)	250
Permeability to water vapour, EN ISO 7783-1/-2. Classification V (g/m ² -day) / S _D (m)	Class I: Permeable to water vapour 340,22 / 0,06
Permeability to water and capillary absorption, EN 1062-3. w (kg/m ² -h ^{0,5})	0,03
Compressive strength at 28 days, EN 13892-2 (MPa)	> 40,7
Flexural strength at 28 days, EN 13892-2 (MPa)	> 8,0
Adhesion on concrete at 28 days, EN 1542 (MPa)	1,61
Suitability for contact with potable water, BS 6920	Suitable
Consumption*	
Consumption by dusting method, (kg/m ²)	1,5 – 2,5
Consumption per coat/total application, (kg/m ²)	1,0 - 1,5 / 2,0 - 3,0

* These figures are for guidance only and may vary depending on porosity, texture and conditions for substrate, and application method. Perform a preliminary test on-site to ascertain the total consumption exactly under jobsite conditions

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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