DRIZORO® Construction Products

MAXCRYL®

LIQUID ADMIXTURE TO IMPROVE BONDING, WORKABILITY AND CURING OF MORTAR AND CONCRETE

DESCRIPTION

MAXCRYL® is a water-based pure acrylic product to be used as an admixture to increase both physical and chemical properties of cement-based mortars and concrete. The fresh mixes prepared with ***MAXCRYL***®, provide greater adhesion, workability, cohesion and water retention.
Once hardened, ***MAXCRYL***® improves the mechanical resistances to compressive and flexural strength, enhances abrasion and wearing resistance, and provides a reduction of water absorption by capillarity.

APPLICATIONS

- ***MAXCRYL***® gives ***MAXSEAL***®, ***CONCRESEAL***® ***PLASTERING*** and other ***DRIZORO***® mortars, greater adhesion to smooth surfaces and improves curing process.
- As an admixture for mortars in structural and pavement repair, levelling of surfaces, protection and decoration of facades, etc.
- Preparation of a cement-based bonding slurry in repairs, screeds and/or levelling previously to pour concrete or mortar, on both vertical and horizontal surfaces.
- Improvement of quality for masonries and renders with low cost.
- Porosity sealer and primer applied directly on the surface.

ADVANTAGES

- Improves the workability of the mixture and reduces water demand with the same consistency, thus minimizes the shrinkage and risk of hydraulic cracks during the hardening.
- Enhanced the adhesion over polished surfaces or substrates especially absorbent.
- Provides a better curing under high temperature conditions, due to the higher water retention, reducing the risk of plastic cracks.
- Increase the abrasion and wearing resistance of pavement repair mortars.
- Resistant to U.V. rays, it does not turn yellow in outdoor. Increases the durability and weathering of mortar and coatings.
- Very good resistance to saponification and alkalinity of the cement and it does not deteriorate in immersion applications.
- Improves the impermeability of mortars, reducing the water absorption by capillarity.
- Solvent-free and non-flammable. Environment friendly.

APPLICATION INSTRUCTIONS

Surface preparation
The substrate must be solid, firm, rough and sound, with no poorly adhered parts or surface grouting, and as uniform as possible. It must also be clean and free of paint, efflorescence, loose particles, grease, release oils, dust, plaster, etc., or other substances that could affect the adhesion of the product. If the surface has previously been coated with distemper, lime or acrylic treatments, etc., these must be removed, leaving only the strongly adhered remains. For cleaning and preparing the substrate, preferably on smooth and/or low-absorbent surfaces, use sandblasting or high-pressure water, as aggressive mechanical means are not recommended.

Before applying bonding slurries or mortars prepared with ***MAXCRYL***®, saturate the surface with water, avoiding the formation of puddles, and begin application once the surface has a matt appearance. If it dries out, saturate it again with water.

Application as primer:
In order to seal porosity and get a surface with homogeneous absorption, on very porous substrates and/or with different grades of absorption apply one coat of pure ***MAXCRYL***® as primer by brush, broom or roller, without leaving puddles or areas of accumulation due to excess load. Allow it to dry 15 minutes approximately and once ***MAXCRYL***® has

been completely absorbed in the support, depending on porosity and ambient temperature, apply the mortar or concrete.

The estimated consumption, depending on porosity, is about 0,1-0,2 l/m² per coat. In the case of highly absorbent or porous surfaces, apply a second coat once the first coat has dried.

Preparation of bonding slurry:
For structural and pavement repair mortars, in order to apply a first layer that ensures the adhesion to the substrate, dilute 1 part of pure ***MAXCRYL®*** with 1 part of water. Pour the resulting mixture into a clean container and gradually add the mortar, mixing it with a low-speed electric drill (400-600 rpm) fitted with a mixing disc for approximately 2 to 3 minutes until you obtain a smooth, lump-free, creamy consistency. After allowing the mixture to rest for 2-3 minutes, mix it briefly again before beginning application.

To facilitate the penetration of the bonding slurry into the pores and cavities, use a brush or broom with stiff nylon fibres, such as ***MAXBRUSH®*** or ***MAXBROOM®***, pressing it lightly onto the substrate. Apply the grout in a continuous, uniform layer, avoiding spreading it as if it were paint, i.e. with a load of 1,0 to 1,5 kg/m², ensuring that the thickness does not exceed 2 mm. Before the slurry dries, continue with the application of the subsequent mortar. If the bonding slurry dries, apply a new one to continue the work.

Preparation of the mortar:
Mix previously the cement and controlled aggregates in the required proportions according to the final use. In a separate container dilute 1 part of ***MAXCRYL®*** with 3 parts of water, depending on the type of work and requirements demanded. Mix preferably using mechanical means such as a low-speed mixer (400-600 rpm) or concrete mixer, until a homogeneous and workable mortar without lumps is obtained. Mix and apply it by trowel without pressing too hard.

If several layers need to be applied, mark the surface of each layer with a trowel to improve the adhesion of the following one, which can be placed after the previous layer has set. Allow it to cure for seven days before painting over or if the repair was exposed to traffic. Trial mixes with other different rations can be made according to the specific work, to make sure that it fits to the requirements demanded.

***MAXCRYL® ratios for different applications*:**
Make a dilution of ***MAXCRYL®*** and water, as mixing liquid with the indicated proportions for the following products:

- ***MAXSEAL®*** (Technical Bulletin No. 01), ***MAXSEAL® FOUNDATION*** (Technical Bulletin No. 08), ***MAXQUICK®*** (Technical Bulletin No. 05) and ***MAXMORTER® CAL*** (Technical Bulletin No. 195): 1 part of ***MAXCRYL®*** and 3 parts of water.
- ***CONCRESEAL® PLASTERING*** (Technical Bulletin No. 06): 1 part of ***MAXCRYL®*** and 3,5 parts of water.
- ***MAXROAD®*** (Technical Bulletin No. 27): 2 parts of ***MAXCRYL®*** with 1 par of water.

Applications conditions
The working temperature range is 5°C to 35°C. Do not apply when the substrate and/or ambient temperature is below 5°C or if lower temperatures are expected within 24 hours of application. Likewise, do not apply to frozen or flooded surfaces.

When applying at high temperatures, in strong winds and/or low relative humidity, thoroughly moisten the substrate with water until saturated. Avoid application above 35°C and direct exposure to sunlight/extreme heat during application.

Curing
When exposed to unfavourable environmental conditions (direct sunlight with high temperatures, wind, etc.), standard curing measures for cementitious products should be taken to prevent rapid drying, such as protecting with plastic film, damp burlap, water sprinkling, or a high-quality water-based curing agent such as ***MAXCURE®*** (Technical Bulletin No. 49).

Cleaning
Tools and equipments should be cleaned immediately with water after use. Once it sets can be removed only by mechanical methods.

CONSUMPTION / DOSAGE

The estimated consumption of ***MAXCRYL®*** as a primer is 0,1 to 0,2 l/m².

Consumption may vary depending on the texture, porosity and condition of the substrate, as well as the application method. Carry out an on-site test to determine the exact value.

The dosage of ***MAXCRYL®*** as an additive (additive:water ratio by volume) in the preparation of mortars varies from 1:2 to 1:3 depending on the desired application.

Carry out representative preliminary tests to adjust the optimum dosage of the additive according to the application and the requirements.

IMPORTANT INDICATIONS

- Respect the dosage range as an additive and the minimum and maximum consumption levels as a primer.
- For other uses not specified in this Technical Bulletin or further information, consult our Technical Department.

PACKAGING

MAXCRYL® is supplied in 2, 5 and 25 litres jerrycans, and in 220 litres drums.

STORAGE

Twelve months in its original unopened containers, in a dry and covered place protected from frost, with temperatures above 5°C.

Prolonged storage below the recommended temperatures may cause the product to crystallise and/or increase in viscosity. In case of freezing, it must be heated slowly, while being regularly stirred, until achieve its usual liquid appearance without lumps. Avoid overheating.

SAFETY AND HEALTH

MAXCRYL® is not a toxic product in its composition, but eye and skin contact must be avoided. Use gloves and safety goggles. In case of eye contact thoroughly clean with clean water, but do not rub. In case of skin contact, wash affected areas with water and soap. If irritation persists, seek medical attention.

It is available Safety Data Sheet of ***MAXCRYL***®. It is non-corrosive and non-flammable.

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

TECHNICAL DATA

Product characteristics	
Aparience and colour	Milky liquid
Density (g/cm^3)	1,01 ± 0,05
pH	9 ± 1
Application conditions and curing	
Minimum application and curing temperature (°C)	> 5
Consumption*	
Consumption as a primer (l/m^2) Preparation of bonding slurries. Additive:water ratio (by volume) Preparation of additive mortars. Additive:water ratio (by volume)	0,1-0,2 1:1 1:2-3

* Consumption may vary depending on the texture, porosity and condition of the substrate, as well as the application method. Carry out an on-site test to determine the exact value.

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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