MAXURETHANE® CEM -SF

POLYURETHANE-CEMENT COATING WITH ANTIBACTERIAL PROPERTIES FOR ANTI-SLIP SEALING OF MAXURETHANE® CEM SYSTEM

DESCRIPTION

MAXURETHANE® CEM -SF is a three-component polyurethane-cement based coating, solvent-free, suitable to be used as top-coating of ***MAXURETHANE® CEM*** system.

Antibacterial additives of ***MAXURETHANE® CEM-SF*** inhibit the growth of bacteria at 99%, providing a bacteria-free and highly cleanliness surface.

APPLICATION FIELDS

Top-coating and finishing of ***MAXURETHANE® CEM -F, -L, -V*** and ***-C*** coatings on mineral substrates as concrete or mortar, in chemical industry, food industry, etc.

ADVANTAGES

- Provides an ant-slippery and homogenous finishing over polyurethane-cement coatings, of both smooth and anti-slip finish.
- Hygienic surface with antibacterial activity according to ISO 22196:2011 and JIS Z 2801:2000.
- Excellent chemical resistance against acids, alkali solutions, petrol, etc.
- Very good abrasion and wearing resistance.
- High covering capacity and excellent yields.
- Non-flammable, organic solvent-free.

APPLICATION INSTRUCTIONS

Surface preparation

MAXURETHANE® CEM -SF is formulated to be applied over coatings of ***MAXURETHANE® CEM*** gamma. Surface must be without parts badly

adhered, cement laitance and as uniform as possible. It must be clean and free of paints, efflorescence, loose particles, grease, oils, curing agents, form release agents, dust, gypsum plasters, organic growth or any other contaminant that could affect to the adhesion.

In case of sealing over the smooth pavement system ***MAXURETHANE® CEM -L***, broadcast in fresh silica sand ***DRIZORO® SILICA 0308***. Once it is dry, sweep and vacuum surface to remove excess of sand and apply ***MAXURETHANE® CEM -SF.***

Mixing

MAXURETHANE® CEM -SF is supplied as a three-component pre-weighed set. Premix liquid components A and B separately, pour them to a clean container and mix until achieving a homogeneous liquid, using a slow speed electric drill (300-400 rpm) fitted with a disc mixer. Then, add gradually component C powder to the liquid and mix as before, for about 2-3 minutes until achieving a smooth, lump-free and homogeneous consistency mortar. Do not mix for prolonged period nor use high-speed mixer, which may heat the mixture or introduce air bubbles. Check Technical Data Table for the pot life of the product (15-20 minutes at 20°C).

Application

Apply ***MAXURETHANE® CEM -SF*** by squeegee, brush or broom such as ***MAXBRUSH®*** or ***MAXBROOM®*** over the surface to be covered, paying special attention to the floor-wall encounters, out-standing points and limits of application areas.

Application conditions

Do not apply when rain, contact with water, condensation, dampness or dew is expected within the first 24 h after application.

The optimum temperature range for application is from 10°C to 30°C. Do not apply with substrate and/or ambient temperature is at or below 5°C, or when temperatures are expected to fall below 5°C within 24 h after application.

Do not apply to frozen surfaces. Ambient and surface temperature must be at least 3ºC higher than dew point. Do not apply with R.H. higher than 85%. Measure the relative humidity and dew point before applying close to marine environment.

With low temperatures and/or high humidity levels, use dry and warm air in order to get the suitable conditions, such as with an electric powered air blower system. Temperatures above 30ºC lead a quick-setting between components and heat production, so the pot life is greatly reduced.

Avoid applications in areas exposed directly to sunlight at high temperatures.

Curing

Allow ***MAXURETHANE® CEM -SF*** to cure 24 h for pedestrian traffic and 72 h for its total putting into service, at 20ºC and 50 % R.H. Lower temperature, poor ventilation area and/or higher R.H. increase the curing time.

Cleaning

All tools and equipments must be cleaned immediately with ***MAXSOLVENT®*** after use. Once product hardens, it can only be removed by mechanical means.

CONSUMPTION

Estimated consumption of ***MAXURETHANE® CEM -SF*** is 0,5-0,6 kg/m^2 per coat.

Consumption may vary depending on porosity, texture, substrate conditions and application method. A preliminary test on-site will determine the total consumption exactly.

IMPORTANT INDICATIONS

- Do not apply on substrates subjected to rising humidity or indirect hydrostatic pressure. Surface moisture content should not exceed 8 %. Allow enough time to dry the substrate after rain, dew, condensation or other inclement water, and after cleaning of substrate.
- Do not exceed the consumption recommended per coat.
- Allow the curing time of the coatings of ***MAXURETHANE® CEM*** system before applying ***MAXURETHANE® CEM -SF.***
- Do not add solvents, aggregates, admixtures or any other compounds.
- For other uses not specified in this Technical Bulletin or further information, consult our Technical Department.

PACKAGING

MAXURETHANE® CEM -SF is supplied in pre-weight three-component set of 26,3 kg: (A: 7,5 kg; B: 8,8 kg; C: 10 kg). It is available in standard grey, white, red and green colour. Other colours available upon special request.

STORAGE

Twelve months in its unopened original packaging. Store in a cool, dry and covered place, protected from moisture, frost and direct sunlight, with temperatures from 5°C to 35°C.

Prolonged storage or temperatures below 5°C may lead the crystallisation of product components. Should this happen, it must be heated slowly at moderate temperature while it is regularly stirred until achieving its homogeneous and original lump-free appearance.

SAFETY AND HEALTH

MAXURETHANE® CEM -SF is not a toxic product but is an abrasive compound. Avoid direct contact with skin and eyes, and breathing dust. Use rubber gloves and safety goggles when mixing and applying the product. In case of skin contact, wash affected area with soap and water. In case of eye contact, rinse immediately thoroughly with clean water but do not rub. If the irritation persists, seek medical assistance.

Consult the Material Safety Data Sheet for ***MAXURETHANE® CEM -SF.***

Disposal of the product and its packaging should be carried out according to the current official regulations and it is the responsibility of the final user of the product.

TECHNICAL DATA

Product characteristics		
General appearance and colour of Component A		Milky liquid
General appearance and colour of Component B		Brown liquid
General appearance and colour of Component C		White powder
Density A, (g/cm^3)		1,00 ± 0,10
Density B, (g/cm^3)		1,23 ± 0,10
Density C, (g/cm^3)		1,25 ± 0,10
Mixing ratio A:B:C, (by weight)		7,5:8,8:10
Density fresh product (A+B+C), (g/cm^3)		1,70 ± 0,10
Density for cured and dry product, g/cm^3)		1,65 ± 0,10
Application and curing conditions		
Temperature / Relative humidity for application, (°C / %)		Ambient and substrate 10-30 / 85
Pot life at 20ºC, (min)		15-20
Setting time at 20°C, (h)		6-8
Total curing time al 20ºC & 50% H.R., (h) - Pedestrian traffic - Light-moderate road traffic - Heavy road traffic		 24 48 72
Cured product characteristics		
Compressive strength at 28 days, (N/mm^2)		45
Flexural strength at 28 days, (N/mm^2)		20
Adhesion on concrete at 28 days, (N/mm^2)		>2,0
Antibacterial activity, ISO 22196:2011 / JIS Z 2801:2000	- Staphylococcus aureus - Klebsiella pneumoniae - Proteus vulgaris - Salmonella sp. - Enterococcus faecalis - Streptococcus pyogenes - Bacillus subtilis	Pass Pass Pass Pass Pass Pass Pass
Consumption*		
Consumption per coat, (kg/m^2)		0,5-0,6

* Consumption may vary depending on porosity, texture, substrate conditions and application method. Perform a preliminary test on-site to determine the consumption exactly.

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.

DRIZORO Construction Products

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