

PRODUCT DATA SHEET

PRI CRETE



Acrylic Modified Emulsion & Waterproof Additive For Mortar & Concrete

PRI BOND'S PRI CRETE is an acrylic emulsion which when added to cement mortar / concrete / grout provides good adhesion, water resistance and improvement of other properties. It is available in form of a milky liquid.

AREAS OF APPLICATION

PRI CRETE is a high quality emulsion that substantially increases the quality of cement mortars /concrete /grout for :

- Rendering and coating
- Jointing
- Repair and adhesive mortar
- Roof finishing
- Bonding of concrete casts
- Tiling
- Waterproof rendering
- Cement injection mix.

FEATURES & BENEFITS

- Extremely good adhesion.
- Reduced shrinkage.
- Greater elasticity.
- Excellent oil and water resistance.
- Increased abrasion resistance.
- Improved chemical resistance.
- Improved UV resistance.

METHOD OF APPLICATION

- Concrete surfaces should be sound and clean, free from oil, grease, cement laitance & loosely adhering particles.
- Absorbent surfaces should be saturated thoroughly with water but without showing any puddle on their surfaces.

APPLICATION INSTRUCTIONS

• **Mixing :**

- Mixing of diluted PRI CRETE to cement mortar / concrete should preferably be done manually. When a concrete mixer is used, pour the mortar as soon as its consistency is cohesive. Do not run the mixer too long.

• **Aggregates :**

- Aggregates used in the mortar / concrete should be well graded and thoroughly washed. Sand particles sizes should correspond to the thickness of mortar to be applied.



Thickness of Mortar	Particle Size
5 mm	0 – 2 mm
6 – 15 mm	0 – 3 mm
over 15 mm	0 – 5 mm

APPLICATION METHOD / TOOLS

1. Bond Coating:

- Prepare the base as indicated above. Apply cement based primer by using PRiCRETE : Water = 1: 4 by volume in order to obtain a thin layer. When the primer coat is still fresh and sticky apply mortar made out of PRi CRETE& water combination.

2. Masonry Jointing:

- Prepare the base as indicated above. Make a firm mortar with fine sand & cement using PRiCRETE : Water = 1: 8. Impregnate the area with primer coat as above. While the primer is wet, apply the mortar and immediately finish or reshape the surface as required..

3. Waterproof Plaster :

- Dilute PRi CRETE with water in the proportion of 1: 6 by volume. Prepare the mortar with this gauging mortar. Cured Plaster with PRi CRETE would harden faster and would be watertight.

4. Bonding Successive Concrete Casts :

- Wash the surface with high-pressure jet. Prepare a pasty mortar with PRi CRETE: Water = 1: 8 by volume. Apply this mortar onto the surface in a layer of 23 – 30 mm thickness. Pour fresh concrete after about an hour. Vibrate carefully to achieve satisfactory interpenetration of mortar and concrete.

5. Polymer Modified Cement Grout for Injection :

- Open the crack lines into V and U groove and fix galvanized iron nozzles spaced at regular intervals of 0.5 to 1.5 mm c/c along groove length with PRi CRETE or PRi LATEX SBR. Prepare a cement grout slurry admixed with PRi CRETE at dilution rate of 1: 4 to 1: 8 by volume with water. Inject the fluid as per normal.

6. Cleaning of Tools :

- Clean all tools and application equipment with water immediately after use. Hardened / cured material can only be removed mechanically

7. Curing Treatment :

- Ensure that freshly applied mortars, renders, floor toppings, etc, are adequately protected from the drying effect of wind, sun and high temperatures. Adopt a curing regime appropriate to the application such as water mist, wet hessian, plastic sheeting, curing membranes.

TECHNICAL INFORMATION

Appearance / Colour	Milky White liquid
Chemical Base	Acrylic dispersion
Density	1.03 kg / l at 27 °C
Solid Content	40%
pH	>7

COMPRESSIVE STRENGTH

(Mpa) PRi CRETE by weight of cement (According to ASTM C 109)

Curing Time	Control	5%	10%	15%
7 Days	30 N/mm ²	20 N/mm ²	25 N/mm ²	29 N/mm ²
28 Days	50 N/mm ²	35 N/mm ²	38 N/mm ²	44 N/mm ²

FLEXURAL STRENGTH

(Mpa) PRi CRETE by weight of cement (According to ASTM C 293 -79)

Curing Time	Control	5%	10%	15%
7 Days	7 N/mm ²	8 N/mm ²	8.5 N/mm ²	8.9 N/mm ²
28 Days	9.5 N/mm ²	10 N/mm ²	10.8 N/mm ²	11.8 N/mm ²

WATER ABSORPTION

PRI CRETE by weight of cement

Control	5%	10%	15%
5.9 N/mm ²	2.9 N/mm ²	2.0 N/mm ²	1.60 N/mm ²

Substrate Temperature : +15°C min. / + 40°C max.

Ambient Temperature: +15°C min. / + 40°C max.

PACKAGING

5 & 20 KG.

STORAGE & SHELF LIFE

Storage

- Store under cover away from direct sunlight and protect from extreme temperature
- In hot temperature conditions, it must be stored in a temperature-controlled environment i.e., less than 30°C.

Shelf Life

- Shelf Life is 18 months from the date of manufacturing.

HEALTH AND SAFETY

- PRiBOND is alkaline and should not come into contact with skin or eyes.
- Avoid inhalation of dust during mixing.
- Gloves, goggles and dust masks should be worn.
- Any contact to eyes should be washed immediately with clean water and seek medical advice.