

ROCKBOND SCP LTD

FORMULATORS, MANUFACTURERS AND CONSULTANTS OF SPECIAL CONCRETE PRODUCTS

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ROCKBOND UNDERWATER ADMIX 2301 POWDER

UNDERWATER ACCELERATING ADMIXTURE FOR MORTARS AND NON FLOW CONCRETES

DESCRIPTION:

ROCKBOND UNDERWATER ADMIX 2301 (RB UWA2301) powder is a unique blend of admixtures which has been specially formulated to produce non flow, early strength underwater mortars and non flow concretes. The powder contains a system of anti washout agents, accelerators, stability aids and other ingredients to prevent wash out and segregation under pressure. The compound is ready to use, supplied to order, packaged in moisture proof, durable bags and has a shelf life of 5 years.

SPECIAL PROPERTIES:

- * Can be packaged in water soluble bags for convenient handling.
- * Minimises "fog" or dispersion when poured and placed underwater.
- * Extremely stable, and will not breakdown, segregate or bleed.
- * Readily pumpable and stable under pressure.
- * Produces accelerated cementitious materials which will resist wave action at an early age.
- * Contains no deleterious substances harmful to aquatic life.
- * High yielding, economical, non flammable, non toxic, odour free, user friendly and safe to use.
- * Long lasting shelf life of 5 years or more when bags are stored in a cool, dry and dark place

USES:

- + To produce non flow, cohesive, accelerated underwater mortars and concrete from site batched materials when ambient temperatures are low.
- + To install concrete structures and sea defences in the tidal zone when time is short.
- + Concrete repairs to marine structures that have to resist wave action at an early age.
- + To produce chemically resistant, durable underwater mortars and concretes.
- + For use in concrete for underwater void filling of seawalls, harbours, quays and jetties.
- + For use in the quick repair of water retaining structures, dams, pillars and piers.
- + Materials involved with waterlogged foundations, anchorages, pilings, conduits, pipes and sewers.

MIXING INSTRUCTIONS:

ROCKBOND UNDERWATER ADMIX 2301 cementitious mortars and non flow concretes are mixed with water using a using a ROCKBOND CONCRETE STIRRER (RB CS), an electric power tool (1kW) and a ROCKBOND 25 LITRE MIXING CONTAINER (RB 25LMC). Use a ROCKBOND FORCED ACTION PAN MIXER 120 LITRES (RB FAPM120) to mix larger amounts of material.

ROCKBOND ADMIX 2301 powder is added to and dispersed in the mix water. The dosage rate is normally 5% by weight of cement contained in the mix: 5kg of ROCKBOND ADMIX 2301 powder per 100kg of cement. Minimum cement content of the mix should not be less than 400kg cement/1m³ of concrete

Start the mixer. Add the appropriate amount of the admixture to the mix water, and let the powder disperse. Add the remaining ingredients of the mortar or concrete, and mix until homogeneous.

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APPLICATION PROCEDURE:

Carry out and finalise any preparation necessary before mixing and applying the mortar or concrete. Ensure that all surfaces with which the mortar or concrete comes into contact with are clean and free of marine growth. The use of a water jet will produce a good and strong substrate on which to apply the material.

For the placement of site batched materials on weak, friable or porous concrete substrates above the waterline, use ROCKBOND PRIMER LATEX (RB PL) to penetrate, consolidate, strengthen and seal the surface. With a brush or a soft broom, brush the latex completely and evenly over the surface. Let the latex dry out, usually 15 to 20 minutes depending on conditions. To prime the substrate and to enhance the bond, apply a second coat of the latex to the first coat. Normally, 1 litre of the ROCKBOND PRIMER LATEX will treat 5m² of concrete surface with a two coat application.

For the application of grouts and flowing concretes when a quick early strength is required, or when ambient temperatures are low, use the ROCKBOND UNDERWATER ADMIX 2401 (RB UWA2401) for flowing, accelerated cementitious materials.

TECHNICAL DATA:

As a guide: for a concrete containing 500kg/m³ of cement, at a water/cement ratio of 0.35, to achieve a strength of 5MPa at 2 hours, 20MPa at 4 hours and 30MPa at 6 hours, use:
5% UWA2301 by weight of cement at 20°C, 10% UWA2301 at 15°C, 15% UWA2301 at 10°C, 20% UWA2301 at 5°C and below.

HEALTH, SAFETY AND STORAGE:

ROCKBOND UNDERWATER ADMIX 2301 powder is non toxic and safe to use. However, use the same precautions as with any cementitious product: wear goggles, protective clothing and a dust mask while mixing and applying the material. Consult the relevant MSDS for further details. Store in a cool, dry, dark place.

FURTHER INFORMATION:

Should you require further information on this product, or details of other ROCKBOND SPECIAL CONCRETE PRODUCTS, then please do contact our Technical Department:

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<https://rockbond.co.uk/products/rockbond-underwater-admix-2301-rb-uwa2301/>

IMPORTANT NOTE:

ROCKBOND SCP LTD provides the above information in good faith and without warranty. The data represents typical values which can be updated at any time, and this information supersedes previous issues. No liability can be accepted for any damage or loss arising from the use of ROCKBOND SCP LTD literature or its products, because the company has no continuous control on how the products are mixed, placed or cured.

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