ROCKBOND
MAKING CONCRETE STRONGER

RB 6.03

TECHNICAL DATA SHEET

ACCELERATING POWDER (A301)

Chloride-Free accelerating powder admix for grout.

DESCRIPTION

A301 Accelerating Powder (RB 6.03) is a blend of chloride free admixtures which has been specially designed to accelerate the early strength development of Portland based cementitious materials. The admixture can be dry mixed with Portland cement, or added to the mix water of cementitious renders, mortars, floor screeds and non-flow concretes. The compound rapidly accelerates the early strength development of non flow cementitious materials at 20°C and produces an early strength development at low temperatures. The powder is ready to use, supplied to order, packaged in moisture proof, durable bags and has a shelf life of five years.

SPECIAL PROPERTIES

- Can be packaged in water soluble bags for convenient handling.
- HAC and chloride free: contains no deleterious substances.
- The finished product will not readily flow, slump, or suffer plastic settlement.
- Will produce high early strength, non-flow materials for spray applications.
- Will accelerate the early strength development of cement-based materials at low temperatures.
- Combines with, immobilises and neutralises chloride or sulphate ions.
- High yielding, economical, non-flammable, non-toxic, odour free, user friendly and safe to use

USES

- To produce quick strength, quick drying, site batched, renders, mortars and concretes at 20°C.
- To accelerate the early strength development of cementitious materials at low temperatures.
- For use in high build applications, and to minimise slumping and bleeding.
- To speed up application and finishing time during winter weather work.
- For use in cementitious materials to repair concrete in tidal situations, marine defences and offshore environments.
- For addition to site batched mortars for the laying and pointing of bricks and blocks at low temperatures, or during winter weather work.
- For the manufacture of precast products when a quick turn around of the moulds are required.
- For addition to reinforced concrete where corrosion of steel is a problem.
- To produce non flow sulphate and chloride resistant reinforced concrete.

MIXING INSTRUCTIONS

Admix 301 cementitious materials are mixed with water using a concrete stirrer, a pneumatic or electric power tool and a 25 litre mixing container. Use a forced action pan mixer to mix larger amounts of material.

Admix 301 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 ADMIX 301 powder per 100kg of cement.
However, the dosage rate will depend on the cement type, the water/cement ratio, the volume to surface area ratio, the ambient temperature and the required rate of early strength development. Trials should be carried out to determine the required dosage.

If necessary, use Admix 201 powder to pro-duce a flowing material, reduce the water/cement ratio and enhance the strength of the mix.

As a guide: for a 500kg/m^3 cement mix at a water/cement ra-tio of 0.35, to achieve a strength of 5MPa at 2 hours, 20MPa at 4 hours and 30MPa at 6 hours, use: 5% A301 by weight of cement at 20°C, 10% A301 at 15°C, 15% A301 at 10°C, 20% A301 at 5°C and below.

Start the mixer. Add the appropriate amount of the admix-ture to the mix water, and let the powder disperse. Add the remaining ingredients of the mix, and mix until homogeneous.

APPLICATION PROCEDURE

For concrete repairs and flooring applications: prepare the concrete to produce a clean and strong surface. On weak, friable or porous substrates, use Latex Concentrate (RB7.15) to penetrate, consolidate, strengthen and seal the surface. With a brush or a soft broom, brush the latex completely and evenly over the surface. Work the latex well into the substrate. 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 latex to the first coat. Normally, 1 litre of Latex will treat 5m^2 of concrete surface with 2 coats of latex. Substrate surfaces without the use of the Latex should be wet.

Once the material is in place and has gained sufficient strength, apply Membrane Cure (RB 7.11) at the rate of 8m^2/litre. During adverse curing conditions, repeat the procedure.

HEALTH AND SAFETY

Admix 301 powder is nontoxic 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.

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TECHNICAL INFORMATION

Should you have any queries, or require further information, please contact our **Technical Sales Team: +64 4 568 5401**