

MONOCRETE PW 100

Powder waterproofing admixture for concrete and mortar

Description

MONOCRETE PW 100 (Powder) is based on specially processed naphthalene sulphonated condensates and additives and supplied as a light yellow powder readily miscible with water.

Concrete however well made is to some extent porous and water must be prevented from penetrating through capillary pores. The presence of water in hardened concrete can cause corrosion of reinforcement which is made severe by freezing and thawing of concrete containing absorbed moisture. Further deterioration can occur if the water penetrating the concrete contains dissolved aggressive salts.

MONOCRETE PW 100 (Powder) provides protection against deterioration due to the pores, left by the slow evaporation of the excess water not taken up by hydration of cement.

MONOCRETE PW 100 (Powder) entrains a controlled amount of air which does not increase with the dosage. The risk of capillary suction is reduced by the induced air which blocks the pores. The plasticising action of **MONOCRETE PW 100 (Powder)** aids in producing denser concrete/mortar with greatly reduced permeability.

Applications

MONOCRETE PW 100 (Powder) is a waterproofing admixture for use in all cement based mortars, screeds and concrete.

Advantages

Improves durability by minimizing penetration of moisture and water based chemicals.

- No additional water into dry or semi-dry mixes.
- Reduces efflorescence and pigment leaching from cement mortars.

- Chloride free.
- Improves plasticity cohesion.
- Better compaction and finishing.

Compatibility

MONOCRETE PW 100 (Powder) can be used with all types of Portland cement and cement replacement materials. Setcrete RMW (Powder) is compatible with other STARKE admixtures used in the same concrete mix.

Technical Properties:

Colour: Light yellow powder

Chloride content: Nil

BS 5075

Air entrainment: Up to 2% additional air

Standards

MONOCRETE PW 100 (Powder) complies with IS 2645.

Method of Use

Mixing

Hand mixing

- Measure out the required quantity of sand/aggregate followed by the cement.
- Sprinkle the correct quantity of Setcrete RMW (Powder) evenly over the cement.
- Mix the dry materials until an even colour is obtained.
- Add the normal measured quantity of water and mix to achieve a homogeneous mixture.

Machine mixing

- Add the measured quantity of sand/aggregate into the drum and mix continuously.
- Add the cement and sprinkle the correct quantity of Setcrete RMW (Powder) at the same time.
- Mix the dry materials for at least 2 minutes.

- Add the normal measured quantity of water and mix to achieve even a homogeneous mixture.

Dosage

The guidance dosage of **MONOCRETE PW 100** (Powder) is 0.5 kg per 50 kg of cementitious materials in the mix, including GGBFS, PFA or microsilica.

Representative trials should be conducted to determine the optimum dosage of Setcrete RMW (Powder) to meet the performance requirements by using the materials and conditions on actual use.

Points to be considered in waterproof concrete

- . Lower water to cement ratio gives lower permeability concrete.
- . Good concrete placing and compaction are very important to produce waterproof concrete.
- . Fresh concrete should be protected against rapid drying and cured properly.
- . Cold joints must be avoided.

Cleaning

MONOCRETE PW 100 (Powder) can be removed immediately by brush. If the spillage is mixed with water, attention should be taken not to leave slippery film.

Packaging

MONOCRETE WP100 (Powder) is available in 0.5 and 1 kg bags.

Effects of Over Dosage

MONOCRETE WP100 (Powder) over dosage will increase air entrainment which may cause a reduction in the compressive strength.

Storage

MONOCRETE PW 100 (Powder) has a shelf life of 12 months from date of manufacture if stored at temperatures between 2°C and 50°C.

If these conditions are exceeded, STARKE Technical Department should be contacted for advice.

Cautions

Health and Safety

MONOCRETE PW 100 (Powder) is not classified as hazardous material. Setcrete RMW (Powder) should not come into contact with skin and eyes.

In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly. For further information refer to the Material Safety Data Sheet.

Fire

MONOCRETE PW 100 is nonflammable.

More from starke construction chemicals A wide range of construction chemical products are manufactured by STARKE which include:

Concrete admixtures.

Surface treatments

Grouts and anchors.

Concrete repair.

Flooring Coating

Sealants.

Waterproofing.

Adhesives.



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