

PROCRETE LP20 PC Based Water reducer



Description:

PROCRETE LP20 is a chlorine free Poly carboxylic ether based water reducing admixture. It is supplied as a brown solution which instantly disperses in water. It disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively and improving the consistency of the concrete. This produces higher levels of workability for the same water content, allowing benefits such as water reduction and increased strengths to be taken.

Uses:

- To improve the effectiveness of the water content of a concrete mix
- Higher dosages provide effective means of reducing concrete permeability and thereby reducing water penetration

Advantages/Characteristics:

- Allows specified strength grades to be met at reduced cement content or increased workability
- Water reduction significantly improves compressive strengths at all ages and enhances durability through the production of low permeability concrete.
- Minimizes the risk of segregation and bleeding and assists in the production of a dense, close textured surface, improving durability.
- Chloride free, safe for use in prestress and reinforced concrete.

Product Standard Compliance:

- IS 9103:1999
- BS: 5075:1985 part-3

- ASTM C494 Type A

Company Standard Compliance:



Technical Information:

Properties	Specification
Appearance	A Brown Color Liquid
Sp. Gravity	1.05 to 1.10 @25°C
pH Value (IS 9103:1999)	7 to 8
Chloride Content (IS 9103:1999, IS 6925, EN 480-10)	<0.1
Alkali content	Typically less than 5.0g Na ₂ O equivalent / litre of admixture.
Classification according to IS 9103 : 1999 (3.3)	Increases workability of freshly mixed mortar or concrete without increasing water content or maintains workability with a reduced amount of water.

Classification according to ASTM C494	Type A
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Application Procedure:

PROCRETE LP20 can be added into the mixing water or directly into the concrete mixture after 50-70% of the mixing water has been added. The addition of PROCRETE LP20 to dry aggregates or cement is not recommended. To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

Dosage Range:

The optimum dosage of PROCRETE LP20 to meet specific requirements should always be determined by trials this allows the optimization of admixture dosage and mix design and provides a complete assessment of the concrete mix. A starting point for such trials is to use a dosage within the normal typical range of 0.6 to 1.2% of cementations material, including PFA, GGBFS and micro silica.

Benefits:

- **Strength:** Reduced water cement ratio in concrete will ultimately increases the strength of concrete in all ages. This admixture will decrease water demand required for concrete and reduced water will increase strength of concrete.
- **Reducing water permeability ('waterproofing'):** One of the most effective means by which the water permeability of a concrete mix can be reduced is to make a large reduction in water- cement ratio. PROCRETE LP20 can be used to provide such a reduction and to produce a concrete with the benefits of low permeability.

Limitation:

- Excessive water addition or overdosing may cause bleeding or segregation.
- If frozen / separation of the product has occurred, Redwop PROCRETE LP20 may be used after thawing slowly at room temperature and intensive mixing. Before application, suitability tests must be performed.

Basis of Product Data:

All technical data stated in this product data sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.



Compatibility

PROCRETE LP20 may be combined with many other Redwop products. Trials must always be carried out before combining products in specific mixes. Contact Redwop Technical Services for additional information and any specific combinations.

Packaging:

PROCRETE LP20 is supplied in 200 kg drums.

Storage & Shelf-Life:

PROCRETE LP20 has a minimum shelf life of 12 months provided the temperature is kept within the range of 2 °C to 50 °C. Should the temperature of the product fall outside this range then contact Redwop office for advice.

Health & Safety:

PROCRETE LP20 does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

For further information refer the Safety Data sheet available for this product.

PRODUCT FOR PROFESSIONAL USE.

Fire:

PROCRETE LP20 is water based & non- flammable.

Legal Notice:

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