

PLASTCONE AP211

Water reducing
concrete admixture



Description:

PLASTCONE AP211 is a chlorine free water reducing admixture based on selected sugar-reduced lignosulphates. 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:

PLASTCONE AP211 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 PLASTCONE AP211 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 PLASTCONE AP211 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.

Compatibility:

PLASTCONE AP211 is compatible with other Fosroc admixtures in the same concrete mix. All admixtures should be added to the concrete separately and must not be mixed together prior to addition. The performance of concrete containing more than one admixture should be assessed by the trial mix procedure recommended in this data sheet to ensure that, effects such as unwanted retardation do not occur.

PLASTCONE AP211 is suitable for use with all types of ordinary Portland cements and cement replacement materials such as PFA, GGBFS and micro silica.

Dispensing:

The correct quantity of PLASTCONE AP211 should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results.

Limitation:

- Excessive water addition or overdosing may cause bleeding or segregation.
- If frozen / separation of the product has occurred, Redwop PROCRETE R75 may be used after thawing slowly at room temperature and intensive mixing. Before application, suitability tests must be performed.

Curing:

As with all structural concrete, good curing practice should be maintained, particularly in situations where an overdose has occurred.

Packaging:

PLASTCONE AP211 is supplied in 200 kg drums.

Storage & Shelf-Life:

PLASTCONE AP211 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:

- PLASTCONE AP211 does not fall into the hazard classifications.
- However, it should not be swallowed or allowed to come into contact with the 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 the eyes, it should be rinsed immediately with plenty of water and medical advice sought immediately.
- If swallowed medical attention shall be sought immediately - Vomiting should not be induced.

Fire:

PLASTCONE AP211 is water based and nonflammable.

Legal Notice:

The information, and, in particular, the recommendations relating to the application and end-use of Redwop products, are given in good faith based on Redwop's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Redwop's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Redwop reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



It is the practice of increasing efficiency with which buildings use resources- energy, water and materials-while reducing building impacts on human health and the environment.



ISO 45001 is the world's international standard for occupational health and safety, issued to protect employees and visitors from work-related accidents and diseases.



ISO 9001:2015 is a globally recognized standard for quality management systems (QMS). It helps organizations of all sizes and sectors to: Improve performance, Meet customer expectations, Demonstrate commitment to quality, and Identify and improve processes that lack consistency.



ISO 14001 is the internationally recognized standard for environmental management systems (EMS). It provides a framework for organizations to design and implement an EMS, and continually improve their environmental performance



This symbol is used to identify Redwop products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



Our Commitment To The Environment
Redwop products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.



ISO/IEC 17025 enables laboratories to demonstrate that they operate competently and generate valid results, thereby promoting confidence in their work both nationally and around the world.