

PROCRETE NPL S15

PC based water
reducer admixture



Description:

PROCRETE NPL S15 is PC based water reducer admixture and supplied as a brown liquid instantly dispersible in water. This generally improves cement dispersion. At the start of the mixing process an electrostatic dispersion occurs due to which cement particle's capacity to separate and disperse increases. This mechanism considerably reduces the water demand in flow able concrete.

Uses:

- To produce lower and medium grade concrete
- To produce pump able concrete
- To produce high strength, high grade concrete by substantial reduction in water resulting in low permeability and high early strength.
- To produce high workability concrete requiring little or no vibration during placing.

Advantages:

- Easier, quicker placing and compaction
- Provides high early strength concrete and with reduced water contents precast concrete
- High Durability due Denser, close textured concrete with reduced porosity
- Risk of segregation and bleeding minimized; thus aids pumping of concrete
- Safe in pre stressed concrete and with sulphate resisting cements and marine aggregates

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
---------------------------------------	--------

Application Procedure:

PROCRETE NPL S15 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 NPL S15 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:

Trials need to be carried out at site to determine the exact dosage of the admixture for the particular mix design and materials. However for normal grades of concrete a dosage from 0.4% - 1.0 % by weight of cement is recommended, the dosage may be increased to 1.5% to achieve specific slump requirements. For microsilica concrete where a high amount of water reduction and slump retention are required, trials need to be carried out to arrive at the correct dosage, as the dosage may increase up to 2.0% or even up to 2.5% by weight of cement depending on mix design and performance required.

Benefits:

- **Cohesion:** Cohesion is improved due to dispersion of cement particles thus minimizing segregation and improving surface finish.
- **Compressive strength:** Makes possible major reductions in water: cement ratio which allow the production of high strength concrete without excessive cement contents.
- **Durability:** Reduction in W/C ratio enables increase density and impermeability thus enhancing durability of concrete.

Limitation:

- Excessive water addition or overdosing may cause bleeding or segregation.
- If frozen / separation of the product has occurred, Redwop PROCRETE NPL S15 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 NPL S15 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 220 kg drums.

Storage & Shelf-Life:

PROCRETE NPL S15 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 NPL S15 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 NPL S15 is water based & non- flammable.

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.