PC-Conblend® WP+

High-Performance Water-Reducing and Waterproofing Admixture for Concrete and Mortar

PC-Conblend® WP+ is a sophisticated liquid admixture designed to improve the workability of concrete and mortar mixes while reducing water content. It also offers outstanding resistance to water ingress. This product is based on PCE (Polycarboxylate Ether) and incorporates specially formulated polymers. It is compatible with all types of cement and binders, including fly ash, ground granulated slag, silica fume, and metakaolin, among others.

FEATURES

PC-Conblend® WP+ is a ready-to-use, economical liquid admixture that requires a low dosage and provides dual-action water reduction and waterproofing performance. It improves the workability, cohesion, pumpability, and surface finish of concrete and mortar while reducing segregation and maintaining compressive strength. Its waterproofing properties effectively resist water penetration caused by hydrostatic pressure and capillary absorption, producing dense and impermeable concrete with enhanced durability. In addition, it improves resistance to sulphate attack, reduces the risk of reinforcement corrosion, and contributes to the extended service life of concrete structures.

PRODUCTS PROPERTIES

Physical Properties	Description
Form	Liquid
Colour	Dark Brown liquid
Relative Density	Approx. 1.09 ± 0.02 at 25°C
pH Value	> 6
Chloride Ion Content	Nil (Chloride-free)
Solubility	Soluble in water
Type	ASTM C494: A & D

PACKAGING

Available in 1 kg, 5 kg, 25 KG and 200 kg drums, with bulk supply available upon request. Packaging is designed to ensure safe handling, storage, and ease of use on construction sites.

USES

PC-Conblend® WP+ is designed for use in all varieties of concrete and mortar utilized in residential, commercial, and infrastructure projects. It is especially beneficial for concrete applications that are frequently or occasionally in contact with water, including seawalls, tunnels, basements, and structural or precast concrete in exposed superstructures. This dual-action admixture acts as both a waterproofing agent and a plasticizer, significantly improving the performance of cement concrete, mortars, and plasters.

DOSAGE

As a guideline, it is recommended to use a dosage range of 100 ml per 50 kg bag of cementitious material for PC-Conblend® WP+. The optimal dosage should be established through trial mixes. Higher dosages may be necessary under specific material combinations or if a water reduction exceeding 15% is required. Due to variations in concrete materials, job site conditions, and applications, dosages outside the recommended range may also be necessary. In such instances, please consult your local PC-WC representative. For further information regarding the **PC-Conblend® WP+** admixture or its application in creating concrete mixes with specialized performance characteristics, do not hesitate to reach out to your local PC-WC representative.

APPLICATION

PC-Conblend® WP+ is supplied as a ready-to-use liquid admixture. For best results, the measured quantity should be diluted with the mixing water to ensure uniform dispersion before adding to the concrete or mortar mix. It should be introduced during the batching or mixing stage. Maintain the water–cement ratio as low as possible to achieve the desired workability and waterproofing performance. Concrete or mortar should be placed, compacted, and cured properly in accordance with good construction practices to achieve maximum durability and impermeability.

STORAGE & SHELF LIFE

The product should be stored in its original, unopened containers in a cool, dry, and covered area, protected from direct sunlight and extreme temperatures. Storage temperatures should not fall below +5°C. If the product becomes frozen, it should be thawed naturally at temperatures above +5°C and gently mixed before use. When stored under recommended conditions, the shelf life is 24 months from the date of manufacture.

COMPATIBILITY

Compatible with most commonly used Portland cements, including ordinary Portland cement, Portland pozzolana cement, and Portland slag cement. It can be safely used with most concrete admixtures such as plasticizers, superplasticizers, retarders, accelerators, air-entrainers, viscosity modifying agents, corrosion inhibitors, and shrinkage-reducing admixtures. However, it is not recommended for use with high alumina cement. Site trials are strongly advised to confirm compatibility and optimize performance when used in combination with other admixtures.

CORROSION

PC-Conblend® WP+ is chloride-free and does not initiate or promote corrosion of steel reinforcement or embedded metal components. By minimizing water penetration and reducing the movement of aggressive ions within the concrete, it lowers the risk of reinforcement corrosion. This protective action helps maintain the structural integrity of reinforced concrete and enhances overall durability in both normal and aggressive exposure conditions.

DURABILITY

Enhances the durability of concrete by reducing permeability and limiting the ingress of water and aggressive agents. By producing a dense and impermeable concrete matrix, it protects the structure from moisture-related deterioration, chemical attack, and environmental exposure. This improvement in impermeability contributes to extended service life and long-term structural performance, particularly in water-retaining and moisture-exposed structures.

SAFETY PRECAUTIONS

Non-hazardous and water-based; however, standard safety precautions should be followed. Avoid ingestion and prolonged contact with skin or eyes. Protective gloves and safety goggles are recommended during handling. In case of skin contact, wash immediately with clean water. If the product comes into contact with the eyes, rinse thoroughly with plenty of water and seek medical advice. If swallowed, seek medical attention immediately and do not induce vomiting. Keep out of reach of children.

ISO 9001 CERTIFIED

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TECHNICAL DATA SHEET UPDATED IN SEPTEMBER 2026
TDS/PC-CONBLEND® WP+/26

All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC 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 any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC 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. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our **website www.pc-wc.com**