

Hydroseal P

Hydrophilic rubber based on polyurethane

Swellable water bar used for the purpose of sealing joints.

PROPERTIES

Hydroseal P is a hydrophilic rubber based on polyurethane, which is available in different sizes. Hydroseal P is used for sealing purposes in civil engineering, structural engineering as well as tunneling for waterpressure up to 5bar.

Hydroseal P has a three dimensional polymer structure, which is build up from unstructured polyurethane chains (macromolecules). The elastomeric features arise due to the weak cross linkage of the polymer chains. The swelling ability happens due to hydrophilic polymer resins, which can expand in contact with water in excess of 300% by volume. Hydroseal P is used for sealing of construction joints, restoration of expansion joints, sealing of precast concrete segments, sealing of tubing part in tunneling, proofing of shafts and pipe penetrations.

APPLICATION INSTRUCTIONS

Sealing of construction joints

For the successful application of Hydroseal P in construction joints, the profile has to be placed into the center of the reinforcement or at least 10 cm away from the concrete flanks. It has to be adhered fully with Polyseal PP / Polyseal Swell / Bitubond N to the substrate. If necessary the profile can also be nailed onto the concrete. It has to be sure that the profile cannot change its position while concreting. Rough surfaces should be smoothed before adhering the profile. This can be achieved with the application of Polycrrete concrete repair products or with the sealant Polyseal Swell which develops in contact with water expansion to seal any gap or undulations between the surface and Hdyroseal P.

Jointing of end and side laps

Joints and lap-over areas are to be fixed by means of Polyseal Swell / Polyseal PP / Bitubond N.

Sealing of precast concrete segments

If used for sealing of precast concrete elements it is recommended to create a notch in the segments. The applied profile is chosen so that the elements create already at assembling a prestress. A proper plugging can be achieved with mounting cements like Polyquick FS or a permanently elastic sealant e.g. Polyseal PP.



TDS_Hydroseal P_GCC_0519



STORAGE & SHELF LIFE

Store all material between 10 and 25°C in a cool, covered dry place. Do not expose the containers to direct sunlight and keep away from all sources of heat. In tropical climatic conditions, the product has to be stored in an air-conditioned environment and protected from high humidity. The shelf life of the product is 12 months in unopened condition if stored as per the recommendations. Exposure to high temperature and humidity will result in considerable deterioration of the product and reduce its shelf life.

HEALTH & SAFETY

As with all construction chemical products caution should be always be exercised whilst usage. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately and seek medical advice. Should any of the product be accidentally swallowed do not induce vomiting, but call for medical assistance immediately. Ensure that the container is available for medical attendant to examine any relevant instructions and contents details.

For any further information please refer to the material safety datasheet

SUPPLY

Hydroseal P	10x20mm	10 numbers of 5m roles in one box
	20x20mm	8 numbers of 5m roles in one box

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Color	Blue	
Density, [g/cm ³]	Approx. 1.0	ASTM D 792
Shore 'A' Hardness	Approx. 30	ASTM D 2240
Hydrostatic pressure, [m]	>50 (5bar)	BS EN 12390
Swelling rate, [%]	>300 by volume	ASTM D 590
Swelling retarding	Yes	
Profile types	Rectangle and box profiles	

All values given are subject to 5-10% tolerance.

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.