

HYDROSTOP HYDROPHILIC POLYMER WATERSTOP

PROPERTIES

Hydrostop is a hydrophilic polymer based waterstop, ultra thin profiled, re-swellable, polymer based on the latest Hybrid Technology to overcome problems commonly occuring with Bentonite based and PVC Waterstop during fixing and concrete pouring. Hydrostop is used for sealing purposes in civil engineering, structural engineering as well as tunneling for water pressure upto 5bar.

Hydrostop has a three dimensional polymer structure, which is build up from chemically resistant unstructured Polyurethane chains (macromolecules). The linkage of the polymer chains is resistant to micro-bacterial attack.

The swelling ability happens due to hydrophilic polymer resin, which can expand in contact with water upto 750% to 800% from its original volume and has a capacity to swell and shrink during repeated wet/dry cycles.

Hydrostop is safe and environmentally friendly material suitable for use in potable water tank, water retaining structures to used for sealing of construction joints, restoration of expansion joints, sealing of precast concrete segments, sealing of tubbing part in tunneling, proofing of shafts and pipe penetrations.

Other areas of application:

Water Tanks and Reservoirs.

Waste Water Treatment Structures.

Sewage Treatment Structures / Concrete Pipes.

Swimming Pools.

Cast in Place and Segmental Tunnels.

Dams.

Basements.

Marine Structures such as Dry Docks / Culverts.

Pile Caps / Secant Pile Walls.

APPLICATION

Sealing of Construction Joints:

For the successful application of Hydrostop in construction joints, the profile has to be placed into the centre of the reinforcement or at least 10cm away from the side exposed to water. It has multi installation option, adhered fully using primer and can be nailed onto the concrete substrate. It has to be sure that the Hydrostop profile cannot change its position while concreting. The surface must be free from cavities, cracks, gravel pockets. The rough surfaces should be smoothened before priming or nailing of the profile.

TECHNICAL DATA

Storage	Cool and dry in the original packaging upto 1 year
Colour	Blue (other colours available on request)
Density	Approx. 1.0gr/cm3
Hardness	Approx. 38 (Shore A type)
Tensile Strength	Approx. 1.5 MPa - 2.1 MPa
Elongation	Approx. 490% - 770%
Hydrostatic Pressure	>50m (5bar)
Swelling Percentage	Approx. 750% - 800% by volume
Swelling Retarding	Yes
Profile Types	Rectangle and Box profiles
Size	5mm x 18mm
Packaging	7 x 15 metre coil / carton (other packing also available)

STORAGE & SHELF LIFE

Store all material between 10 - 25 deg 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 climate conditions, the product has to be stored in an air-conditioned environment and protected from high humidity. The shelf life of the product is 24 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 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.



The information given in this datasheet is based on both current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no control over methods of application, site, conditions, etc.







