TECNOS[®] HP 80

Hydrophobic pore blocking waterproofing admixture

Tecnos[®] HP 80 chloride free admixture is supplied as a turbid liquid which instantly disperses in water. Tecnos[®] HP 80 is an organic liquid which reacts with products of the cement hydration process to produce a hydrophobic material which repels external water, reducing absorption into the concrete.

Uses

Tecnos[®] HP 80 will drastically reduce water absorption in structural and precast concrete. It is suitable for use in belowground structures, reinforced concrete in marine areas, piles, water retaining structures, manholes, waste water treatment and desalination plants.

Benefits

- Bitumen ammonia free system
- Provides integral protection, ensuring reduced permeability throughout the concrete
- Integral protection is maintained even if surface damage occurs, unlike applied surface films or coatings
- Lower water: cement ratio improves compressive streng that same workability
- Fully compatible with certain Thermax surface coatings and finishes

Technical support

Thermax provides a technical advisory service for onsite assistance and advice on admixture selection, evaluation trials and dispensing equipment. Technical data and guidance can be provided for admixtures and other products for use with fresh and hardened concrete.

Dosage

The optimum dosage of Tecnos[®] HP 80 to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. This allows the optimisation of admixture dosage and mix design and provides a complete assessment of the mix. The normal recommended dosage is 1.5 to 2.0 litres per 100 kg of cement.

Effects of overdosing

An overdose of double the intended dose of Tecnos[®] HP 80may result in increased retardation and workability, hence reduce the short term strength development. Long term strength is unlikely to be affected.

Use at Other Dosages

Dosages other than those given on this sheet may be used to meet particular mix requirements provided that adequate supervision is available. Compliance with requirements must be assessed through trial mixes. Contact the Thermax Technical Department for advice in these cases.

Properties

Appearance	Turbid Solution
Specific Gravity	Typically 1.10-1.15 @ 30⁰C
Chloride Content (BS 5075)	Nil
рН	11-13

Instructions for use

Compatibility

Tecnos[®] HP 80 is compatible with MICROBETON POZ and when used in the same concrete mix, but should be added to the mix separately and must not be mixed together prior to addition. The resultant properties of mixes containing more than one admixture should be assessed by the trial mix procedure recommended on this data sheet.

Tecnos[®] HP 80 is suitable for use with all types of Portland cements, SRC cements and cement replacement materials such as PFA, GGBFS and microsilica.

Dispensing

The correct quantity of Tecnos[®] HP 80 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. Contact the Thermax Technical Department for advice regarding suitable equipment and its installation.

Curing

As with all structural concrete, good curing practice should be maintained, particularly in situations where an overdose has occurred. Water spray, wet hessian or a Maxcure[®] CC 75 applied curing membrane should be used.



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Typical performance example

Tecnos[®] HP 80 meets the water absorption requirements of the European Standard BS EN 934-2.

Many variables in concreting materials and conditions can affect the selection and use of an admixture. Trials should be carried out using relevant materials and conditions in order to determine the optimum mix design and admixture dosage to meet specific requirements.

A typical performance example from evaluation studies of Tecnos[®] HP 80 shall be given on request. The values quoted are representative of results obtained and are provided as illustrations of the performance.

Because of the variability of concreting materials, the results should only be taken as typical of the performance to be expected. Results quoted are not necessarily directly comparable with results obtained elsewhere for Tecnos[®] HP 80 or other products.

Tecnos[®] HP 80 combined with Tecnos[®] 95 KV produce high performance, low absorption results.

Health & Safety Instructions

Avoid contact with skin. Any splashes in the eyes should be washed with plenty of water and medical advice sought. If swallowed medical advice shall be sought and vomiting shall not be induced.

Fire

Tecnos[®] HP 80 is non-flammable.

Storage

Tecnos[®] HP 80 has a minimum shelf life of 12 months if the temperature is kept within the range of 10°C to 50°C.Should the temperature of the product fall outside this range contact Thermax office for advice.

Packing Supply

Tecnos[®] HP 80: 5, 20ltr and 260kg barrel.

Other Segments:

Concrete Admixtures
Surface Treatments
Grouts & Anchors
Repair & Rehabilitation

Protective Coatings
Industrial Flooring
Waterproofing
Sealants
Adhesives

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