



NanoGuard P

Integral water proofing powder admixture for concrete and mortar

Description	NanoGuard P is an integral waterproofing admixture. It is formulated from a blend of hydrophobic and reactive minerals, when used as an admixture, forms an internal barrier against water penetration. NanoGuard P also increases the plasticity of mortar; reduces water absorption and thereby guards against freeze-thaw damage. It is available in powdered form without chlorides for additional densification and acceleration of the mortar or concrete.															
Primary applications	<ul style="list-style-type: none"> • Structural and precast concrete • Floor screeds • Mortars and Plasters • Basements roof slabs and screeds, • Water retaining structures • External plastering, • Bathrooms • Balconies 															
Features /Benefits	<ul style="list-style-type: none"> • Reduces permeability • Provides integral protection, ensuring reduced permeability throughout the concrete and mortars. • Integral protection is maintained even if surface damage. • Reduces moisture absorption. • Reduces capillary action. • Reduces vapor transmission through walls and slabs. 															
Specifications	Meets the requirements of IS : 2645 – 75 standard .															
Properties	<table border="0"> <tr> <td>Appearance:</td> <td>Free flowing powder</td> </tr> <tr> <td>Colour:</td> <td>Off white</td> </tr> <tr> <td>Bulk density- tapped,(gm/ml):</td> <td>0.9 ± 0.05</td> </tr> </table> <p>Testing conditions of mortar in both cases are Cement : Sand=1 : 6 Storage at 20°C and RH 65%.</p> <table border="0"> <thead> <tr> <th></th> <th>Control</th> <th>With 2% of NanoGuard P</th> </tr> </thead> <tbody> <tr> <td>Water absorption(in 80 Hours)</td> <td>200 ml</td> <td>20ml</td> </tr> <tr> <td>Compressive Strength(at 28 days)</td> <td>15MPa</td> <td>20MPa</td> </tr> </tbody> </table>	Appearance:	Free flowing powder	Colour:	Off white	Bulk density- tapped,(gm/ml):	0.9 ± 0.05		Control	With 2% of NanoGuard P	Water absorption(in 80 Hours)	200 ml	20ml	Compressive Strength(at 28 days)	15MPa	20MPa
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Packaging	10* 1kg bags.															
Storage	Store in a dry and cool place below 35°C. Protect from direct sunlight.															
Shelf life	12 months if stored properly in original unopened packaging.															
Instruction for use	<p>Dosage: 2-3% of cement. It is advisable to carry out trial mixes to establish the exact dosage rate required.</p> <p>Dispensing: NanoGuard P is added to the dry mixed cement/sand prior to the addition of water.</p> <p>Compatibility: NanoGuard P can be used with all admixtures. . All admixtures 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. NanoGuard P is suitable for use with all types of Portland cements and cement replacement materials such as SC, HAC, GGBFS and micro silica.</p> <p>Curing: Normal curing procedure should be adopted.</p>															
Cleaning & Disposal	All tools and equipment should be washed with water immediately after use. Do not dispose of into water or soil but according to local regulations.															
Precautions/Limitations	For best results quality of concrete should be very good and a minimum cement content of 300kg/m ³ is usually recommended. It is also advised to use a combination of NanoPlast SP 456 at the dosage of 1% and NanoGuard P at the dosage of 2% by weight of cement to achieve the maximum results.															
Health & safety	NanoGuard P is mildly alkaline, Wear suitable protective gloves and goggles. In case of contact with the skin, wash immediately with soap and 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.															