

PRODUCT CODE 5652

QUARTZ CRYSTALLINE ADMIX

PRODUCT DESCRIPTION

SmartCare Quartz Crystalline Admix (integral crystalline waterproofing admix) is added to the concrete mix at the time of batching. SmartCare Quartz Crystalline Admix is composed of high quality cement, properly selected & graded inert aggregates, proprietary waterproofing active chemicals & additives. It is used as a chemically active waterproofing treatment for concrete. These active chemicals react with the moisture in fresh concrete with the by-products of cement hydration to cause a catalytic reaction, which generates a non-soluble crystalline formation throughout the pores and capillary tracts of the concrete. Thus, the concrete becomes permanently sealed against the penetration of water or liquids from any direction. It is effective against substances of high contact pH value.



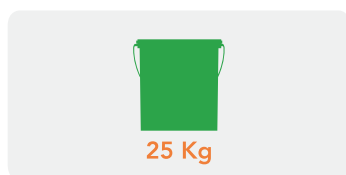
 **asianpaints**

FEATURES & BENEFITS

- Becomes an integral part of the concrete
- Permanent in nature
- Effective against hydrostatic pressure from either positive/negative surface of the concrete slab
- Less expensive than traditional methods
- Added to the concrete at the time of batching and therefore is not subject to climatic restraints
- Seals hairline cracks up to 0.4 mm
- Non- toxic in nature
- Resists chemical attack like chloride, sulfate etc.
- Allows concrete to breath

PRODUCT INFORMATION

AVAILABLE PACKS



COLOURS AVAILABLE

Off White



DOSAGE

0.75% of cement weight



AREAS OF APPLICATION

- Concrete slabs on grade & below grade
- Basement & Pits
- Reservoirs & swimming pools
- Sewage and Water Treatment Plants
- Secondary Containment Structures
- Tunnels and Subway Systems
- Underground Vaults
- Foundations & Civil substrates
- Parking Structures
- Warehouse & commercial floors

MIXING & APPLICATION

For Site mixing in tilt able mixer

1. **Admix Solution** - In a clean bucket add 20% of total water require for concrete followed by SmartCare Quartz Crystalline Admix as per recommended dosage and stir well to prepare admix solution.
2. **Concrete Preparation** - Add aggregates, sand, cement and water and mix well for 2 minutes to prepare concrete mix as per the design. Add Admix solution in to mixed concrete and continue stirring for another 2-3 minutes to get homogeneous concrete mix.

For Ready Mix Plant

1. Dry Batch operation – Add SmartCare Crystalline Quartz Admix in powder form to the drum of the ready-mix truck under the batch plant then add around 60% of the required water along with aggregate. Mix the materials for 2-3 minutes to ensure the uniform distribution of admix, add the balance of materials to the ready-mix truck in accordance with standard batching practices.
2. Central Mix Operation – Mix SmartCare Crystalline Quartz Admix with water to form a very thin slurry. Pour the required amount of material into the drum of the ready-mix truck. The aggregate, cement and water should be batched and mixed in the plant in accordance with standard practices. Pour the concrete into the truck and mix for at least 5 minutes to ensure even distribution of SmartCare Crystalline Quartz Admix throughout the concrete.

Note – Do not add dry SmartCare Crystalline Quartz Admix powder directly to wet concrete, as this may cause lump formation and thorough dispersion will not occur. Conduct trial along with admixture for slump, slump retention etc. For information regarding the proper use of SmartCare Crystalline Quartz Admix for a specific project, conduct a trial first or consult Technical Representative from Asian Paints.

PRECAUTIONS

- Heavy traffic should be avoided until the surface is hardened for at least 5 days.
- Not recommended over moving joints and structures subjected to movements.
- After complete curing of SmartCare Quartz Crystalline Admix, potable water tanks should be thoroughly rinsed with potable water prior to being placed in service.
- SmartCare Quartz Crystalline Admixture & Coating is effective in case of rigid concrete structure only.
- Cracks due to structure movement or load bearing movement can't be taken care by this product.
- This product is alkaline in nature & in powder form. During handling, suitable protection to be taken.
- Freshly applied crystalline waterproofing system must be protected from drying out too quickly in hot condition.
- Should not be exposed to freezing temperature immediately after application.

TECHNICAL INFORMATION

Properties	Results
Appearance	Grey coloured free flowing powder
Dosage	0.75% of cement used
Water reduction	Approx. 5% (Checked in M 30 Mix Design)
Workability	No change, as compared to control
Setting time, Initial & Final	No change as compared to control
Compressive Strength, 28 days (ASTM C 109)	Min 5% increase over control
Chloride (as Cl^-) %, water soluble	0.004
Sulphate (as $SO_4^{=}$) % Water soluble	0.082
Water Permeability, 28 days (DIN 1048- Part 5)	More than 30% reduction over control
Rapid Chloride Ion Penetration, Coulombs (ASTM C 1202)	48% reduction over control
Length change, 28 days	0.01% over control

SAFETY FEATURES

- Kindly refer to the MSDS for Asian Paints SmartCare Quartz Crystalline Admix which gives detailed information on safety measures.
- Store the container with the lid tightly closed in an upright position, in a cool & dry place.
- Keep out of reach of children and away from eatables.
- May be harmful if swallowed. In case of ingestion seek immediate medical attention.
- Wear eye protection during application. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In case of skin contact immediately wash skin with soap and plenty of water. Get medical attention if irritation develops or persists.
- Do not breathe vapor or spray. It is recommended to wear suitable nose pad during sanding and surface preparation to avoid dust inhalation.
- Do not pour leftover paint down the drain or in water courses.
- In the event of spills, contain spillage using sand or earth.