

# JSW KRYSTA LEAKPROOF

**Integral crystalline waterproofing admix for concrete and mortar**



## DESCRIPTION

**JSW KRYSTA LEAKPROOF** is an integral crystalline waterproofing admix. It is a capillary waterproofing compound for concrete and mortar. It comes in a dry powder form and needs to be added to the concrete mix at the time of batching. It consists of selective cementitious material, ultra-fine silica aggregate and various active & proprietary reactive chemicals used for permanent active waterproofing treatment, for concrete and plastering mortar. This active additive reacts with moisture and by-products of cement hydration from concrete to form millions of needle like crystals. These crystals grow and deposit throughout the pores and voids in concrete, permanently blocking to reduce water permeability for forming an impervious barrier to liquids, thereby protecting the concrete & steel reinforcement.



## Reference Standards

DIN 1048 Part 5 | ASTM C1202 | ASTM C 39 | IS 516 | IS 2645

## Applications

### Below Ground-Level & Submerged Structures

- Deep & Shallow Basement Foundations
- Dams, Reservoirs, Canals, Lift Irrigation
- Cooling towers & Ash ponds
- Ammunition Bunkers
- Potable-grade Water Tanks, Swimming Pools
- Marine Jetties & Ports
- Nuclear Water & Waste Containment Structures
- Concrete or Concrete-lined Pipelines
- Storm Water Drains
- Water, Waste Water & Effluent Treatment Plants

### Above Ground-level Structures

- Podiums and Garden Terraces
- Elevator Pits, Bathrooms, Sunken slabs
- Duct Lines, Sewage Drains
- Circular Domes, Flat Roofs and Terraces
- Railway Sleepers, Tetrapods
- Petro-chemical Embankment Areas, Concrete Silos
- Cooling Towers and Chimneys
- Roads, Flyovers and Bridges

## FEATURES & BENEFITS

- Remains permanently active
- Self-seals hairline shrinkage cracks up to 0.5 mm in width
- Resists both positive and negative pressure
- Resists very high hydrostatic pressure up to 16 bar head
- Non Toxic. Safe for potable water contact
- Reduces Chloride permeability
- Improves chemical resistance
- Protects steel reinforcement against corrosion
- Increases durability of concrete
- Reduces permeability, concrete shrinkage and cracking
- Resists capillary moisture ingress

## PRODUCT DOSAGE

### For Concrete

Krysta Leakproof in dry powder dosage of 1% by weight of cement, added to concrete during mixing.

### For Cement Mortar

Krysta Leakproof in dry powder dosage of 1% by weight of cement, added to mortar during mixing.

## PHYSICAL PROPERTIES

Nature of product	Single Component Cementitious Powder
Appearance	Grey Powder
Tapped Bulk Density	1.05 + 0.05

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### TECHNICAL DATA

	RESULTS
Water Penetration	90% Reduction in Depth of Penetration against Control
Water Permeability	56% Reduction in Depth of Penetration against Control
Bulk density	26.5% water percolation Pgainst Control
Resistance to Chloride Penetration (RCPT)	64% Improvement against Control
Compressive Strength	About 12% Increase in Strength against Control

### APPLICATION METHOD

- Krysta Leakproof compound is a dry powder dosage, at 1% by weight of the cement, add into wet concrete during mixing.
- For small mixes, add Krysta Leakproof compound to the aggregates and mix for 2-3 minutes prior to adding cement and water.
- For batching plant-mixed material add Krysta Leakproof compound to 65 -75% of the pre-batches water and mix for 2-3 minutes prior to adding the remaining batched ingredients and further mix for 4-6 minutes in accordance with standard practice.
- In transit mixer, Krysta Leakproof compound disperses in water. Add to transit mixers on site just prior to placing. The minimum mixing time is 4 -6 minutes at agitating speed.

### HEALTH & SAFETY

- Wear PPE's during handling and application, as per health and safety rules.
- In case of prolonged irritation in eyes and on skin due to contact, flush thoroughly with sufficient water.
- Avoid breathing dust.

### COVERAGE

- Store in a dry and enclosed space in the unpacked condition

### PACK SIZE

- 30 kg Bag

### BEST BEFORE

- 6 months from date of manufacturing in sealed condition

**Disclaimer** - JSW construction chemical dry mix products are guaranteed against material and manufacturing defects. The product is sold as per standard terms and conditions of sales, copies which may be obtained on request. JSW's endeavor is to ensure correct and accurate information on product performance and recommended specifications as mentioned in literature, and still may have to abstain from circumstantial deviations which are beyond control due to human intervention, atmospheric conditions or natural calamities which may not be in accordance with any advice, specification, recommendation or information given by it.