

## OVERVIEW

RANSKRYST-ADMIX is an integral waterproofing compound in powder form which acts by crystallization method to seal capillaries in concretes and mortars. RANSKRYST-ADMIX is added to the concrete or mortar at the time of batching. RANSKRYST-ADMIX is a free flowing powder, composed of ordinary Portland cement, selected treated fillers and proprietary active chemical ingredients. In concrete the active ingredients of RANSKRYST-ADMIX react with the products of cement hydration in presence of moisture to activate catalytic reaction which produces non-soluble crystalline formations which block the capillaries effectively and permanently.

## PROPERTIES

- RANSKRYST-ADMIX becomes an integral part of the concrete and waterproofs it.
- Once used as an integral water proofer RANSKRYST-ADMIX resists hydrostatic pressures from both positive and negative sides of the structure.
- This waterproofing system allows the concrete to breathe normally, thereby keeping the concrete healthy for ages.
- Simple dosing into the concrete batching mixers as there is no separate application cost involved.
- RANSKRYST-ADMIX works by crystallization process. Unlike other integral water proofers this is not a mere plasticizing admixture hence it ensures good waterproofing success during concreting itself.
- RANSKRYST-ADMIX does not alter the setting time of the cement in any way. This can be used in any season irrespective of temperature conditions which are within recommendation of the concreting practice codes.
- RANSKRYST-ADMIX is alkaline in nature hence it preserves the alkaline nature of concrete surrounding the reinforcing steel.

## AREAS OF USE/PRIMARY USE

RANSKRYST-ADMIX is used effectively as an integral waterproofing compound in concrete during construction of all water retaining structures, underground and overhead water tanks, swimming pools, water treatment plants, basements, podium slabs, roof slabs and all RCC members around toilets and bathrooms in a building structure. It is also used as integral waterproofing compound in mortars which go as renderings on all these structures. Since leakages corrode the reinforcing steel in RCC structures thereby reducing the life of structure itself, it is a good to use a good integral waterproofing compound in all concrete produced for use in RCC structures.

## INSTRUCTIONS FOR USE

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the waterproofing system are as follows:

### DIRECTION FOR USE:-

RANSKRYST-ADMIX is recommended at a dosage of 2% by weight of cement.

RANSKRYST-ADMIX is added to the dry mix of concrete or mortar at the recommended dosage and mixed before addition of designed amount of water.

RANSKRYST-ADMIX does not alter the water requirement of the concrete. Mixing, placing, compacting and curing of concrete is expected to go as per usual practice and no special care or requirement

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is needed because of **RANSKRYST-ADMIX** addition to the concrete mix.

#### **ACTION**

**RANSKRYST-ADMIX** is composed of Ordinary Portland Cement selected and treated fillers and proprietary active chemicals. In contact with the moisture these active chemicals catalyze the reaction of products of cement hydration to form insoluble micro-fine crystals which effectively block the capillary structures in the concrete body blocking the passage of water. Thus the concrete becomes permanently sealed against any penetrating water or liquids.

#### **GOOD CONCRETING PRACTICE**

For achieving good quality waterproof concrete the following guidelines are recommended: Concreting when ambient temperatures over 33°C or below 4°C are not recommended. Minimum cement content in concrete for achieving good waterproof quality is 300Kgs/ M. Pouring of the concrete after its initial or final setting time of the concrete has lapsed is not recommended. For a waterproof concrete water/cement ratio should be maintained at 0.43 or less depending upon grade of concrete. Control joints in big structures need to be incorporated as per the requirement and the design of a competent structural engineer. Any deformations, cracks and structural failures arising out of want of control joint design will nullify all waterproofing treatments and create more problems.

#### **DOSAGE**

**RANSKRYST-ADMIX** is recommended to be added to the dry concrete mix at a dosage of 2% by weight of cement.

#### **PRECAUTION:**

Mix/Use only the required quantity of material, which can be utilized within stipulated pot life to avoid solidification.

Wash all the tools and tackles with industrial solvent immediately after the application is completed.

#### **HEALTH & SAFETY**

Avoid prolonged contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

#### **PACKGING & STORAGE**

**RANSKRYST-ADMIX** is supplied in 20kg Bags.

Store containers in a clean dry area protected from direct sunlight and extreme heat and cold. Unopened containers can be stored for 12 months.

## PICTURES/IMAGES AT GLANCE



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