

## OVERVIEW

RANSCONMIX-SP210 is Brown solution based on selective Polymers to produced high workability concrete without loss of strength. It promotes high and early ultimate strength by taking advantage of water reduction whilst maintaining workability.

## PROPERTIES

- **Anticorrosive:** Helps to produce corrosion free structure.
- **Bleeding and segregation minimized:** Produces high quality concrete of improved durability and impermeability.
- **Increased Strength:** Provides high early strength for pre-cast concrete with the advantage of higher water reduction ability.
- **Improve workability:** Increased workability reduces placing time and labor cost.
- **Improve Quality of Concrete:** Denser, close textured concrete with reduced porosity and hence more durable.
- **Chloride Free:** Safe in pre-stressed concrete and with sulphate resisting cement and marine aggregates.
- **Higher Cohesion:** Cohesion is improved due to dispersion of cement particles. Minimize segregation and finish of concrete surface.

## AREAS OF USE/PRIMARY USE

- High early and ultimate strength concrete
- High performance concrete for durability
- To produce high workability concrete requiring little or no vibration during placing.
- High workability without segregation or Bleeding.
- Pre-cast & Pre-stressed concrete.
- Concrete containing pozzolans such as micro silica, GGBFS, PFA including high volume fly ash Concrete.

## 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:

### COMPATIBILITY

It can be used with all types of cement except high Alumina cement. Site trial should be carried out to optimize dosages.

- **Workability:** Can be used to produce flowing concrete requires no compaction. Some minor adjustments may be required to produce high workable mix without segregation.
- **Water Content:** Mix 20-25% less water than required.
- **Cohesion:** Cohesion is improved due to dispersion of Cement particles thus minimizing segregation and improve surface finish.
- **Compressive strength:** Early compressive strength is increased upto 20% if water reduction is taken advantage of. Generally, there is improvement of strength upto 20% depending upon water to cement ration and other mix parameters.
- **Durability:** Reduction in water to cement ration enables increase in density and impreamibility thus enhancing durability of concrete.

### DIRECTION FOR USE:-

RANSCONMIX-SP210 should be added to the concrete mix/ cement mortar during the mixing cycle at the same time as the water and the aggregates. Never add RANSCONMIX-SP210 to the dry cement.

RANS ENGINEERING & CHEMICALS offers a comprehensive range of products and services for most concrete and finishing needs. Please contact the RANS Technical Service Department or your local RANS agent for further information, samples, demonstrations and instructor services. The information given in this leaflet is based upon laboratory research, as well as extensive field work and application. All products are sold subject to standard conditions of sale which are available on request. This information is based on RANS present state of knowledge and is intended to provide general information on RANS's products and their methods of use. The prospective user is recommended to determine the suitability of RANS's suggestions and products before adopting them on a commercial scale.

### **DOSAGE**

The rate of addition of **RANSCONMIX-SP210** is typical between 160 ml to 400 ml per 100 kg cement.

At dosage beyond 400 ml per 100kg of cement, it may act as a retarding plasticizer.

### **EFFECTS OF OVER DOSAGE**

A severe over-dosage of **RANSCONMIX-SP110** will result in the following:

- Retardation of initial set.
- Increase in air entrainment.
- Increase in workability

### **Dosage:**

The optimum dosage is best determined by site trials with the concrete mix that enables the effect of workability, strength gain or cement reduction to be measured. Site trial with this product should always be compared with mix containing no admixture. As a guide the rate of addition is generally in the range of 0.5-to 2-litres/100 kg of Cement.

### **Over Dosing:**

An over dose of double the recommended amount of this product will result in very high workability and some retardation of setting time will occur. However, the ultimate compressive strength will not be impaired.

### **Dispensing:**

The measured quantity of this product should be added along with the gauging water. For best result,

add this product in the last phase after pre-wetting the mix with 80% of the total water required.

### **Mix Design:**

RANS has a dedicated advisory service on concrete mix Design and can be controlled if assistance is required.

### **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**

**RANSCONMIX-SP210** is available in 20, 50 and 200 Kgs Pails.

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

**TECHNICAL  
DATA**

<b>Product</b>	Anticorrosive Water Reducing High Range Superplasticizer
<b>Appearance</b>	Brown liquid
<b>Specific gravity</b>	1.20 kg/l at 200°C
<b>Air entrainment</b>	Less than 1%
<b>Chloride Contents (As per IS:456)</b>	Nil
<b>Alkali content</b>	< 72 gr.Na <sub>2</sub> O equiv./l
<b>Packaging</b>	20 Kgs, 50 Kgs & 200 Kgs.
<b>Storage</b>	12 months in original unopened containers.

**PICTURES/IMAGES AT GLANCE**



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