

## OVERVIEW

RANCONMIX-SP310 is based on Sulphonated Naphthalene Polymers and supplied as a brown liquid instantly dispersible in water. RANCONMIX-SP310 has been specially formulated to give high water reductions upto 25% without loss of workability or to produce high quality concrete of reduced permeability. RANCONMIX-SP310 complies with IS: 9103:1999 and BS: 5075 Part 3.

## PROPERTIES

- **Improved workability** - Easier, quicker placing and compaction.
- **Increased strength** - Provides high early strength for precast concrete with the advantage of higher water reduction ability.
- **Improved quality** - Denser, close textured concrete with reduced porosity and hence more durable
- **Higher cohesion** - Risk of segregation and bleeding minimized; thus aids pumping of concrete
- **Chloride free** - Safe in prestressed concrete and with sulphate resisting cements and marine aggregates.

## AREAS OF USE/PRIMARY USE

- Produces pumpable concrete
- To produce high strength, high grade concrete M30 & above by substantial reduction in water resulting in low permeability and high early strength.
- To produce high workability concrete requiring little or no vibration during placing.

## 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.

The optimum dosage is best determined by site trials with the concrete mix which enables the effects of workability, strength gain or cement reduction to be measured. Site trials with RANCONMIX-SP310 should always be compared with mix containing no admixture. As a guide, the rate of addition is generally in the range of 0.5 - 2.0 liters /100 kg cement.

The measured quantity of RANCONMIX-SP310 should be added along with the gauging water. For best results, add RANCONMIX-SP310 superplasticizer in the last phase after rewetting the mix with 80% of the total water required.

### DOSAGE

The rate of addition of RANCONMIX-S310 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

An over dose of double the recommended amount of RANCONMIX-SP310 will result in very high workability and some retardation of setting time will occur. However, the ultimate compressive strength will not be impaired.

**Compatibility:** Can be used with all types of cements except high alumina cement.

RANCONMIX-SP310 is compatible with other types of RANS admixtures when added separately to the mix. Site trials should be carried out to optimize dosages.

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.

**Workability:** Can be used to produce flowing concrete that requires no compaction.

Some minor adjustments may be required to produce high workable mix without segregation.

**Cohesion:** Cohesion is improved due to dispersion of cement particles thus minimizing segregation and improving surface finish

**Compressive strength:** Early strength is increased upto 20% if water reduction is taken advantage of. Generally, there is improvement in strength upto 20% depending upon W/C ratio and other mix parameters.

**Durability:** Reduction in W/C ratio enables increase in density and impermeability thus enhancing durability of concrete

**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-SP310** 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>	High Performance Super Plasticizer- Sulphonated Napthalene Polymers Based
<b>Appearance</b>	Brown liquid
<b>Specific gravity</b>	1.24 - 1.26 kg
<b>Air entrainment</b>	Approx. 1% additional air entrained
<b>Chloride Contents (As per IS:456)</b>	Nil
<b>Packaging</b>	20 Kgs, 50 Kgs & 200 Kgs.
<b>Storage</b>	12 months in original unopened containers.

**PICTURES/IMAGES AT GLANCE**



**RANS ENGINEERING & CHEMICALS PVT. LTD**

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