

Retarding Superplasticising concrete Admixture

## DESCRIPTION

**DUCONMIX RSP 600** is composed of artificial polymers specially designed to impart Rheoplastic qualities to concrete.

## RECOMMENDED USE

**DUCONMIX RSP 600** is used for ready mix concrete to increase setting time, long hauls, pumped concrete, containing granulated slag/pozzolans, mass concrete pours, hot weather concreting etc.

## FEATURES AND BENEFITS

- High workability for longer periods
- Lower pumping pressure
- Reduced permeability
- Resistance to segregation at high Workability
- Reduced thermal peaks
- Extended setting with longer workability
- Reduced water content
- Higher ultimate strengths
- Improved durability
- Reduced shrinkage and creep
- Increased ease in finishing concrete
- Provides lower in-place cost

## PERFORMANCE TEST DATA

Aspect	Dark brown free flowing liquid
Relative Density	1.22±0.02 at 25° C
pH	≥6
Chloride ion Content	<0.2%

## Test Certification/Approvals

- ASTM C-494 Type B, D & G
- EN 934-2: T11.1/11.2
- IS 9103

## Statement of Responsibility (Disclaimer)

The technical information and application advice are based on present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## DOSAGE

Optimum dosage of **DUCONMIX RSP 600** should

be determined with trial mixes. As a guide, a dosage range of **200g to 620g per 50kg** of cementitious material is recommended as an initial point. In high performance concrete a dosage up to **900g per 50kg** of cementitious material can be added subject to prior site trials. Because of differences in concrete materials, job site situations, and/or applications, dosages outside of the recommended range may be required. In such cases, contact our representative.

For additional information on **DUCONMIX RSP 600** admixture or on its use in developing concrete mixes with special performance characteristics, contact our representative.

## Effects of over dosage:

- Long extension of initial and final set
- Increase in air entrainment
- Bleed/segregation of mix, quick loss of Workability
- Increased plastic shrinkage
- A slight overdose may not adversely affect the ultimate strength of the concrete and can achieve higher strengths than normal concrete, provided it is properly compacted and cured.

In the event of over dosage, consult our representative immediately.

## SUGGESTED SPECIFICATION

**DUCONMIX RSP 600** is the retarding superplasticizing admixture for concrete, a sulphonated naphthalene polymer based formulation having slump retaining capabilities. The product shall comply with IS: 9103 and shall be of type G when tested to ASTM C-494. The product shall have average relative density of 1.23 at 25°C.

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### APPLICATION

**DUCONMIX RSP 600** is a ready-to-use liquid which is allotted into the concrete together with the mixing water. The plasticising effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of **DUCONMIX RSP 600** to dry aggregate or cement is not recommended. Automatic dispensers are available.

### COMPABILITY

**DUCONMIX RSP 600** is compatible with most admixtures used in the production of excellence concrete including normal, other mid-range and high-range water-reducing admixtures, air entrainers, accelerators, retarders, extended set control admixtures, corrosion inhibitors, and shrinkage reducers. **DUCONMIX RSP 600** is also compatible with slag and pozzolans such as fly ash, metakaolin and silica fume.

### CORROSIVITY - NON-CORROSIVE

**DUCONMIX RSP 600** admixture will neither initiate nor promote corrosion of reinforcing steel implanted in concrete, prestressed concrete or concrete placed on galvanized steel floor and roof systems. Neither calcium chloride nor any calcium chloride-based elements are used in the manufacture of **DUCONMIX RSP 600** admixture. In all concrete application, **DUCONMIX RSP 600** admixture will follow to the most stringent or minimum chloride ion limits currently proposed by construction industry standards and practices.

### PACKAGING

**DUCONMIX RSP 600** is available in 5Kg, 10Kg, 20Kg & 250Kg drums or bulk.

### WORKABILITY

**DUCONMIX RSP 600** ensures that rheoplastic concrete remains workable in excess of 2 hours at 25°C. Workability loss is dependent on temperature and on the type of cement, the nature of aggregates, the method of transport and initial workability. It is strongly recommended that concrete should be properly cured particularly in hot, windy and dry climates.

### STORAGE/ SHELF LIFE

**DUCONMIX RSP 600** must be stored where temperatures are between 5°C - 45°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is 24 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

### PRECAUTION

Care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapor until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

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