

OVERVIEW

RANCONMIX-SP110 is a high performance set reducing, superplasticising admixture for use in concrete and Portland cement.

RANCONMIX-SP110 admixture helps in reducing setting times in general and especially in lower atmospheric temperature, produce early high and ultimate increased strengths. It reduces bleed and segregation and improves workability too.

RANCONMIX-SP110 does not contain any added chloride ions ensuring that the product does not support corrosion of reinforcing steel. Being anti-corrosive in nature, helps concrete and steel to prevent corrosion.

PROPERTIES

RANCONMIX-SP110 is a ready to use aqueous solution of modified lignin sulphonic acid and organic salts. It is designed to produce the highest compressive, flexural and tensile strength of concrete by means of water reduction and through control of the cement hydration.

- Increased Strength without increase in cement content, highly plasticized concrete/ mortar.
- Improved Durability by increasing density and lowering permeability.
- Speeds up Constructions, Early de-shuttering could be achieved & Water reduction of almost 15-20%.
- Extended setting times at higher dosage.
- Compatibility with all types of Portland cements.
- Chloride free. It is safe in pre-stressed concrete and with sulphate resisting cements.
- Reduced segregation.
- Produces high early strengths.
- Increase workability and increased strengths.
- **Corrosivity - Non-Corrosive.**
- Suitable for bricklaying mortar mixes.

AREAS OF USE/PRIMARY USE

It makes a workable mix with upto 15% less water and gives a stronger, less permeable, durable concrete. It is used in ready mix plants, block and concrete product plants, light weight and pre

-stressed works and pavers.

To accelerate the setting and early strength gain of Portland cement concrete and mortar mixes without the introduction of chloride. Acts as a plasticizer, so gives significant increases in both ultimate and early strengths. Typical applications include pre-cast concrete, concrete placed in cold weather, concrete for repairs, mortars for brickwork.

RANCONMIX-SP110 is designed for use as accelerator to provide high early and higher compressive strengths in concrete; it accelerate the setting times.

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:-

RANCONMIX-SP110 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 RANCONMIX-SP110 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.

RANCONMIX-SP110 is compatible with most admixtures used in the production of quality concrete including normal, other mid-range water-reducing admixtures, accelerators, retarders.

The effect of **RANCONMIX-SP110** is dependent upon the cement properties and the type of plasticizers used in the concrete mix. The setting time and early strength gain may be affected if strong retarders are used in the mix. **RANCONMIX-SP110** admixture will neither initiate nor promote corrosion of reinforcing steel, pre-stressed concrete or concrete placed on galvanized steel floor and roof systems.

Rate of hardening

The temperature of the concrete mix and the ambient temperature (forms, earth, reinforcement, air, etc.) affect the hardening rate of concrete. Within the normal dosage range, it will generally reduce the setting times of concrete containing normal Portland cement approximately by 1 hour to 3 hours compared to a plain concrete mix, depending on materials at site and temperatures. Trial mixes should be made with site materials & approximating the job site conditions to determine the dosage required. It is strongly recommended that concrete should be properly cured particularly in windy and dry climates.

Dosage

The optimum dosage determined by site trails with a specific concrete mix which enables the effects of workability, strength gain and setting time to be measured.

Over dosage

An overdose of double the recommended amount of **RANCONMIX-SP110** will result in a slight increase in initial acceleration, but will not alter the strength or characteristics of the cured concrete or mortar.

Mixing

RANCONMIX-SP110 should be stirred before use. **RANCONMIX-SP110** is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The dispersing of admixture shall be more uniform if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been

added. The addition of **RANCONMIX-SP110** to dry aggregate or cement is not recommended.

EFFECTS OF OVER DOSAGE

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

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

DOSAGE

The rate of addition of **RANCONMIX-SP110** 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.

CURING:

Normal curing methods such as water pounding/spray or wet Hessian must be used.

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

RANCONMIX-SP110 is available in 5, 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**

Product	Anticorrosive Set Reducing Superplasticising Admixture
Appearance	Brown liquid
Specific gravity	1.18 kg/lit.at 20°C
Air entrainment	Less than 1%
Chloride Contents (As per BS:5075)	Nil
PH by ph meter	8
Packaging	20 Kgs, 50 Kgs & 200 Kgs.
Storage	12 months in original unopened containers.

PICTURES/IMAGES AT GLANCE



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