

## Innovative admixture for High Early Strength concrete to produce Self Consolidating Concrete or Flow Concrete.

### Uses

Auracast 404 is a high performance super plasticizer suitable for precast concrete industry to obtain high early strength and moderate workability retentions are required.

Auracast 404 developed to use in:

- Moderate workability retention concrete.
- Suitable for Self-compacting concrete.
- High performance concrete.
- High early strength.

### Standard Compliance

Auracast 404 complies to IS:9103 : 1999 as a water reducing admixture and as a Superplasticizer and ASTM C 494 Type G and Type F depending on dosage.

### Advantages

- Low viscosity admixture suitable for precast industry
- Suitable for concrete having cement replacements and low water cement ratio
- Provides high early strength without increase in cement content or reduction in workability. Ideal for precast concrete production
- Reduce rate of workability loss normally associated with super plasticiser. Reduces shrinkage cracking because of lower water cement ratio. Makes the concrete water impermeable
- Better resistance to Carbonation
- Reduce Shrinkage and Creep
- Increased durability

### Description

Auracast 404 is a unique combination of new generation super plasticizer based on polycarboxylic ether polymer with long lateral chain. Electrostatic dispersion mechanism considerably reduces the water demand in flowable concrete. It is supplied as a light brown liquid, instantly dispersible in water.

Auracast 404 disperses the cement particles effectively in the concrete mix and hence exposes a larger surface area to the hydration process. This effect is used either to increase the strength or to produce high workability concrete or reduce cement content of concrete or to retard the setting time of concrete.

### Technical support

Fosroc provides technical advisory service for on-site assistance and guidance on mix design, optimum dosage evaluation of trials.

### Properties

Appearance	: Light Brown Liquid
pH	: Minimum 6.0 *
Volumetric mass @ 25 <sup>o</sup> C	: 1.05 to 1.09 kg / liter *
Chloride Ion content	: As per BS EN : 480-10-1997* (Product contains a chemical which interferes in the procedure as per IS 9103)
Workability Retention	: 2 hours and more Depending on Dosage

\* The uniformity parameters like specific gravity, pH, chloride content etc. will vary for specific customer requirements and mix design. Please refer our MTC issued for specific product configuration for measuring our product parameters that will be constantly and consistently administered.

### Dosage

The optimum dosage of Auracast 404 to meet specific requirement should always be determined by conducting laboratory and batch trials. However the normal dosage ranges between 0.3 to 2.0 percent by weight of total cement or binder content.

### Dosage beyond Limits:

Dosage beyond limits can be used to meet particular mix requirements in consultation with Fosroc technical department

### Effects of overdosing

Overdosage may cause delay in the setting time and segregation.

# Auracast 404

## Estimating

### Packaging

Auracast 404 is available in 200kg, 250kg drums and bulk supply.

### Storage

Auracast 404 has a minimum shelf life of 12 months provided the temperature is kept within range of 5°C and 50°C.

## Precautions

### Health and safety instructions

Auracast 404 does not fall into the hazard classifications of current regulations. However it should not be swallowed or allowed to come in contact with skin or eyes.

Suitable protective gloves and goggles should be worn.

Splash on skin should be cleaned with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately do not induce vomiting.

## Fire

Auracast 404 is water based and non- flammable.

## Cleaning and disposal

Spillage of Auracast 404 should be absorbed onto sand, earth or vermiculite and transferred to suitable container. Remnants should be hosed down with large quantity of water.

The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

## Additional information

The Fosroc range of associated products includes high strength cementitious, epoxy grout, polyester resin based mortar for rapid pre-setting of steel shims to level or for direct bedding of small base plates; Resin Anchoring systems for same day anchoring of bolts in drilled holes in concrete or rock. Also available a range of products for use in construction; viz., curing compounds, release agents, flooring systems, repair mortars, sealants and waterproofing materials.

Separate datasheets are available on these products.