



constructive solutions

AURACAST 535

High Early / Final Strength Improver / Superplasticizer / High Range Water Reducer Concrete Admixture

Identification of the Product

AURACAST 535 is a unique combination of polycarboxylate polymers which act through a strong steric hindrance mechanism, outperforming conventional superplasticizers.

Displaying excellent dispersion and water reduction capability's **Auracast 535** has been specially engineered for the **precast industry** where high early / final strength and high workability are essential.

Areas of Usage

Ideal for the production of precast elements,

Where high early strength and early demolding requirements are needed,

For ultra-high strength concrete applications and self-compacting concrete applications

This product can be used in wet mixed sprayed concrete production in order to contribute initial and final strengths.

Standards

TS EN 934-2 Chart 3.1 and 3.2: High Range Water Reducing / Superplasticizing Admixture

Features / Advantages

In comparison to concrete without admixture, depending on the applied dosage, reduces water amount of the mixture min. **12%** without risk of segregation.

Improved surface finish

Used in the production of Self Compacting Concrete (SCC), super workable flowing concrete and high workability concrete displays improved consistency which requires little or no vibration.

Provides high early and final compressive strengths

Chloride content is <0.1%. Thus, it is suitable to be used in reinforced concrete constructions.

Provides cost efficiency with decreasing the overhead.

Technical Information

Chemical Content	Based on PCE
Density	1.05 – 1.09 kg/l
pH	4.0 – 6.0
Color	Brown
Total Chloride	Maximum 0.1%
Alkali	< 5

Package

Bulk, 1000 kg IBC, 220 kg barrel and 30 kg plastic bags

Storing Conditions / Shelf Life

It is proper to use the product in 12-months after the production date when it is stored in original, unopened and non-damaged packages in between +5 °C and +45 °C.

It should be avoided from direct sun light and frost.

AURACAST 535

If the admixture is frosted under +5°C, it should be thawed by waiting at ambient temperature without using direct heating and mixed until it becomes homogeneous. Compressed air should not be used during this operation.

Dosage

Depending on performance expected from the concrete, it is used between **0.5 – 2.0%** of the binding material (cement, micro silica, fly ash) amount.

Overdosing above the recommended dosage range may promote segregation, setting time retardation, excessive bleeding of the concrete mix. In the event of a suspected overdose please consult the **FOSROC IDEA Technical Department**.

In order to find optimum admixture dosage, it is recommended to make experimental mixtures in the laboratory because of the different water/cement ratio of the cement and aggregate used.

When it is required, please consult **FOSROC IDEA Technical Department**.

Application Method

After mixing binding material (cement, micro silica, fly ash) and aggregate homogeneously, only 50-60% of the total water which will be added to the mixture is added.

AURACAST 535 is added with the remaining water to the concrete mix.

In order to have the admixture spread homogeneously in the concrete and provide the required performance, the concrete should be mixed for 2-minutes or the period determined in laboratory tests.

Important Subjects

Admixture dosage and application method should be determined in laboratory experiments

The admixture should not be directly poured into dry mix.

Cure of the fresh concrete should be performed properly.

All equipment should be cleaned after using them. Materials which became rigid and cured can only be taken out mechanically.

Notes

All technical information stated out in this product data sheet are based on laboratory experiments.

Values obtained in site applications may show changes because of environment and material conditions.

Health and Security Information

Users can request safety data sheet (SDS) which contains physical, ecological, toxicological information and recommendations related to carrying, storing and safe disposal of chemical products.