

## INNO-MIX FOX ADMENT PC FM300

### High Rate Water Reducing, New Second Generation Super Plasticizer Concrete Admixture

#### Description

**FOX ADMENT PC FM300**, is a polycarboxylic ether-based, new second generation superplasticizer concrete admixture developed for the ready-mixed concrete industry, in accordance with the Total Performance Control concept, which reduces water at a high rate, increases durability, prevents the loss of consistency of concrete while providing early and final high strength.

**TS EN 934 – 2 Table 3.1, 3.2 : High Rate Water Reducing / Super plasticizer Concrete Admixture**

**ASTM C 494 Tip F: In compliance with High Rate Water Reducing / Super Plasticizer Concrete Admixture standards.**

#### Field of Application

- In the production of high quality ready-mixed concrete with or without a pump,
- In the production of Smart Dynamic Concrete, which can be easily placed on densely reinforced concrete elements,
- It is used in the production of non-decomposing, flowable Rheoplastic concrete.

#### Advantages

##### For Ready-Mixed Concrete Producers:

- Provides the supply of high quality concrete to the construction site at any time.
- Provides concrete production with low water / cement ratio, in compliance with TS EN 206-1 criteria, without losing consistency.
- It allows using a single product for many applications.

##### For Contractors:

- Guarantees the delivery of the concrete ordered in the ready mixed concrete plant to the construction site "as desired and defined in the construction site".
- Settles more easily and decreases mold removal time.
- Excellent finished surface is obtained in molded concretes.
- It provides a more diverse concrete design with a single admixture.

##### For Engineers:

- Guarantees the concrete's compliance with the standards.
- Provides more permanent (durable) concrete production.

#### Technical Data

Structure of Material	Polycarboxylic Ether Based
Color	Brown
Density	1,05-1,09 kg/liter
Chlorine Content % (EN 480-10)	<0,1
Alkali content % (EN 480-12)	<3

The above values are given for +23 ° C and 50% relative humidity. High temperatures shorten the time, low temperatures extend the time

#### Total Performance Control

The concept of Total Performance Control includes the acquisition of high quality concrete defined at the project stage by ready-mixed concrete producers, contractors and engineers, and the criteria for transportation, placement, processing and strength gaining starting from the production site of this concrete. **FOX ADMENT PC FM300** is the key to achieving of total performance control in Rheodynamic Concrete (concrete with low water / cement ratio, self-settling concrete which no need the vibration), which emerged with the development of self-compacting concrete technology, increasing processing properties, giving concrete early high strength thanks to accelerated cement hydration, and producing more permanent concrete.



### Compatibility with Other Materials

- **FOX ADMENT PC FM300** is not compatible with other **FOX ADMENT** (Naphthalene sulphonate based) series super plasticizers.
- Can be used with all cement types.
- Can be used with micro silica, fly ash and slag where high binding material such as self-compacting concrete is needed to be used.
- It is used with air entraining additive compatible with the material in order to increase the freeze-thaw resistance.
- **FOX ADMENT MS FM290** is used with micro silica to increase the performance of concrete and its durability in aggressive environments. (Environmental condition XA1-XA3 according to TS EN 206-1.)
- In order to prevent the rapid decrease of the water in the concrete mixture; Shrinkage is prevented by using **FOX BINDER FM125**.
- It is used with synthetic fibers and steel fibers against cracks caused by plastic shrinkage.
- In environments with high temperatures and intense air flow, to prevent evaporation of the mixture water in the concrete, one of the appropriate curing material such as **FOX PL-CURE FR811**, **FOX HYDROCURE FR761**, **FOX ACURE FR570** and **FOX P-CURE FR515** should be selected and used.

### Application

Binder (such as cement-micro silica-fly ash) and aggregate must be mixed until a homogeneous mixture is obtained. After adding 80% -90% of the water to be added to the mixture, **FOX ADMENT PC FM300** must be added to the mixture along with the remaining water. **FOX ADMENT PC FM300** should be mixed within the time determined in laboratory experiments or preferably 100 seconds in order to distribute homogeneously in the mixture.

### Coverage

**FOX ADMENT PC FM300**; It is used at the rate of 0.8-1.5 kg for 100 kg binder (such as cement-micro silica-fly ash slag). The dosage of use is determined based on laboratory experiments. The recommended dosage rate for producing Smart Dynamic Concrete is 0.7-1.2 kg for every 100 kg of binder and thin material that passes through a 0.125 mm sieve. For detailed information, please contact with **SARTECH Yapı Malzemeleri San. ve Tic. Ltd. Şti.** We recommend that you consult the Technical Service.

### Watch Points

- **FOX ADMENT PC FM300** is not suitable for use with other **FOX ADMENT** (naphthalene sulfonate based) series additives.
- Concrete design and admixture dosage should be determined by prior laboratory trials according to the desired concrete class and properties. The binder determined as a result of laboratory tests (cement-micro silica-fly ash-slag) and fine and coarse aggregate must be mixed until a homogeneous and dry mixture is obtained. If additives are added to the dry mixture without adding the mixture water, the additive will be absorbed in the mixture and will not be dispersed uniformly. Even if all the mixing water is added on top of this, the aimed concrete class and properties cannot be obtained. Since the mixture will need additional water, the water amount in design values will be exceeded and the mechanical properties of the concrete will be below the target value. Therefore, concrete admixtures should not be added directly to the dry mixture.
- In case **FOX ADMENT PC FM300** is used at temperatures below +15°C, necessary precautions should be taken in curing conditions (temperature and time) and cement doses.
- Since it is a specially designed product for the user; It may show different properties depending on the cement type and aggregate structure. For this, before concrete production, it should be investigated with preliminary tests whether the additive is suitable for the material or not. The performance of **FOX ADMENT PC FM300** decreases if mixed with other classes of additives. Therefore, storage and mixing equipment should be used after cleaning. For detailed information, please consult on **SARTECH Yapı Malzemeleri San. ve Tic. Ltd. Şti.**

### Package

30 kg bin

1000 kg IBC

### Shelf Life

When stored properly at room temperature, away from direct sunlight, between +5°C and +30°C, its shelf life is 12 months from the date of manufacture. Opened packages can be reused by closing their covers.

### Storage

It should be stored in its unopened original package, away from direct sunlight and away from frost (in environments above +5°C). If the material that is not stored in suitable environments freezes, the product should be thawed by keeping it at room temperature without using direct heat, and mixed by mechanical methods until it becomes homogeneous. Compressed air should not be used in the mixing process. In short-term storage, shipment should be made on a first in, first out system. In long-term storage, pallets should not be placed on top of each other.



### Safety Precautions

It is dangerous to approach the storage and application areas with fire. Storage and application areas should be ventilated. During the application, work clothes, protective gloves, goggles, masks in accordance with the occupational health and safety rules should be used. During storage and application, it should not be contacted with the skin and eyes, should be washed immediately with plenty of water and soap, and if swallowed, seek medical attention immediately. Food and drink materials should not be brought to the application areas. It should be stored out of the reach of children.

For detailed information, please refer to the Material Safety Data Sheet.

### Disclaimer

The data contained in this technical document is based on our scientific and practical knowledge. SARTECH Yapı Malzemeleri San. ve Tic. Ltd Şti. is only responsible for the quality of the product. From the results that may occur due to misuse and other than written suggestions about where and how to use the product, SARTECH Yapı Malzemeleri San. ve Tic. Ltd Şti. cannot be held responsible. The responsibility of the correct application of our product belongs to the user. Our company is only responsible for the quality of the product. This technical form is valid only till a new version is implemented and nullifies the old ones. Our company has the right to make changes in all kinds of information and content details in this catalog. It is imperative to check that the information in the catalog is current and valid. All rights reserved.

