

MasterSet[®] FZP 1

Set Accelerating / Plasticizer Concrete Admixture
EN 934 - 2: T6

Material Description

MasterSet[®] FZP 1 is a polynaphthalene sulfonate and nitrate salt based set accelerating/ plasticizer concrete admixture suitable for cold weather conditions that increases set acceleration and early strengths by increasing the reaction between water and cement especially at the start of set.

Areas of Application

- In the production of pumped and non-pumped concrete.
- While pouring in cold weather to protect concrete from freezing effect and when early high strength is desired.
- In precast and prefabricated concrete

Characteristics and Benefits

A **MasterSet[®] FZP 1** offers the following benefits:

- Reduces concrete's initial and final set time compared to concrete without admixture.
- Especially in cold weathers, protects concrete from freezing effect by giving early strength.
- **MasterSet[®] FZP 1** does not contain chloride.

Chemical Mechanism

MasterSet[®] FZP 1 goes into reaction with cement. When **MasterSet[®] FZP 1** is added to the mixture, it

is absorbed by cement particles. **MasterSet[®] FZP 1** accelerates the reaction between cement and water at the start of set and increases hydration temperature. As a result, setting of concrete is accelerated and its early strength is positively affected

Dosage

Field trials should be conducted to determine the optimum addition rates of **MasterSet[®] FZP 1**. As a starting point, the following dosage range is recommended:

By Mass - 1.0-2.5 kg for 100 kg cement (binder) to accelerate the set depending on cement type, cement dosage, concrete temperature and ambient temperature. When used at very cold weather conditions, it can be used up to 5.0 kg for 100 kg cement (binder)

The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilized in special cases according to specific job conditions. If required consult MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect. Where the concrete is to be machine finished by utilizing power float or power trowelling methods, we recommend that you contact

Technical Properties

Structure of the Material	Sulfonate and Nitrate Salt Based
Appearance	Brown
Specific Gravity (20°C'de)	1.11 -1.18 kg/lt
pH - Value	6,0 – 9,0
Alkali Content (%)	≤ 10.00
Chloride Content (%)	≤ 0.10
Corrosion Behavior	Contains components only from EN 934-1:2008 , Annex A.2:Nitrate
Dangerous Substances	Comply with annex AZ.

MasterSet[®] FZP 1

Set Accelerating / Plasticizer Concrete Admixture
EN 934 - 2: T6

the according to specific job conditions. If required consult MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department for dosage rate guidance.

Mixing

MasterSet[®] FZP 1 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal performance is obtained if **MasterSet[®] FZP 1** is dispensed into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted out. Avoid adding the admixture to the dry aggregates.

Compatibility

MasterSet[®] FZP 1 can be used with all types of **EN 197** Cements. For use with other special cements, contact our MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş. Technical Services Department.

MasterSet[®] FZP 1 should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing MasterSet[®] FZP 1, they must be dispensed separately.

MasterSet[®] FZP 1 is **not compatible** with all admixtures of MasterGlenium[®] series.

Cleaning of Tools

Spraying devices and/or rolls used in the application should be cleaned by warm water. If the spray nozzle will be used again, then it is suggested to be left in water.

Packaging

MasterSet[®] FZP 1 is available in 1000 kg IBCs, 200 kg barrels and 25 kg cans.

Shelf Life

12 months if stored according to manufacturer's instructions in unopened container.

Storage

Store in original sealed containers and at temperatures between 5°C and 30°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

Health and Safety

For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapor until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

MasterSet[®] FZP 1

Set Accelerating / Plasticizer Concrete Admixture
EN 934 - 2: T6

Contact

MBT Teknik Yapı Kimyasalları San. ve Tic. A.Ş.
Eyüp Sultan Mah. Sekmen Cad. Hayy 1000A
No:26/8 Sancaktepe, İstanbul
Tel: 0216 561 35 45 www.mbt-tech.tr