MFS-637
SUPER PLASTICISING CONCRETE ADMIXTURE

MYFIX CONSTRUCTION CHEMICALS

DESCRIPTION
- **MFS-637** is a melamine sulfonate-based super plasticiser concrete admixture that reduces the water/cement ratio of the concrete and increases its early strength.

INTENDED USES
- In the production of precast and prefabricated concrete,
- Production of coloured precast concrete,
- In cold climate concrete castings,
- In the production of prestressed concrete with low water/cement ratio,
- Where moulds need to be removed early,
- In rheoplastic concretes that can be placed easily in reinforced concrete elements,
- It is used in concrete castings produced with zero - slump.

TECHNICAL DATA

Structure of the material	: Melamine sulfonate based
Appearance	: Colourless
Density	: 1.18 -1.20 kg/L
Chlorine content	: (EN 480-10) <0.1%
Alkali content	: (EN 480-12) <5.98%
Compressive strength	: (EN 12390-3) Suitable
Amount of air	: (EN 12350-7) Suitable
Consistency protection	: (EN 12350-2) Suitable
Collapse and spread	: (EN 12350) Suitable
Application ground temperature	: (+5°C) - (+35°C)

- These values are obtained under laboratory conditions ((23±2) ∞C temperature, 50% relative humidity) and may differ due to worksite conditions.
- **MYFIX YILDIZ YAPI KİMYASALLARI SANAYİ VE TİCARET LİMİTED ŞİRKETİ** is not responsible for the application errors that may arise if the application conditions and precautions outlined above are not followed for the purpose of the product.

ADVANTAGES
- Reduces the amount of water at least 12% by weight, compared to concrete without admixture, which is formulated with **MFS-637**.
- Increases initial and final strengths of concrete formulated with **MFS-637** admixture compared to concrete without admixture.
- Increases the compressive and flexural strength of concrete formulated with **MFS-637** admixture compared to concrete without admixture.
- Decreases mould removal time.
- Provides early high strength concrete production even at low temperatures.
- Increases the abrasion resistance of concrete by decreasing decomposing and bleeding.
- Increases the resistance of concrete against freezing and thawing cycle.
- Improves concrete's other mechanical properties such as impermeability, permanence, shrinkage and creep.
- It saves energy in curing concrete with heat. It is placed with less vibration even in tightly reinforced concrete structures.
- **MFS-637** does not contain chlorine.

APPLICATION
- Binder (such as cement-micro silica-fly ash-slag) and aggregate must be mixed until a homogeneous mixture is obtained.
- After adding 50% -70% of the water to the mixture, **MFS-637** must be added to the mixture along with the remaining water.
- **MFS-637** must be mixed in the time determined in the experiments.

CONSUMPTION
- **MFS-637** is recommended to be used at a rate of 1.0-2.0 kg per 100 kg binder (such as cement-micro silica-fly ash-slag). Usage dosage must be determined by prior laboratory experiments according to concrete class and properties.

WARNINGS AND RECOMMENDATIONS
- In accordance with the Occupational Health and Safety Rules, work clothes, protective gloves, goggles and masks must be used during application.
- Concrete design and admixture usage dosage must be determined by prior laboratory tests according to the desired concrete class and properties.
- The binder (cement-micro silica-fly ash-slag) determined by laboratory trials must be mixed with a fine and thick aggregate until a homogeneous and dry mixture is obtained. If admixture is added to the dry mixture without adding mixing water, the admixture will be absorbed in the mixture and will not be spread uniformly. Even if all of the mixing water is added on top of this, the targeted concrete class and properties will not be obtained. Since the mixture will need additional water, the amount of water in the design values will be exceeded and the mechanical properties of the concrete will remain below the targeted value. For this reason, concrete admixture must not be added directly to the dry mixture.
- The amount of admixture in the mixture is calculated by multiplying the total amount of cement and second order binders (such as micro silica-fly ash-slag) with the additive dosage ratio. If more admixture is used than the recommended dosage range, there is no harmful side effect to concrete.
- It must not be contacted to the skin and eyes during storage and application, must be washed immediately with plenty of water and soap in case of contact, and if swallowed, consult a doctor immediately.
- Food and drink materials should not be introduced into the application areas. It should be stored out of the reach of children.

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MYFIX® CONSTRUCTION CHEMICALS

PACKAGING
- 10, 30 kg Plastic jerry can, or 1000 kg IBC

SHELF LIFE
- Shelf life of an unopened package stored according to the appropriate environment ((+10°C) - (+30°C)) is 12 months from the date of manufacture. Opened packages can be used throughout their shelf life by closing the lids tightly and stored in appropriate storage conditions.

QUALITY CERTIFICATES
- In Accordance with **TS EN 934-2** standards.

CE
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DoP number: 07.PB 934-2.001

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TS EN 934-2+A1:2013
Admixtures for concrete, mortar and grout –
Part 2: Concrete admixtures;
MFS-637 SUPER-PLASTICIZER CONCRETE ADMIXTURE
High Range Water reducer/Superplasticizer Concrete Admixtures
(Chart 3.1/Chart 3.2)

SPECIFICATIONS	PERFORMANCE
Compressive strength	In 1 day: Compressive strength of the tested concrete, at least 140% of the concrete In 28 days: Compressive strength of the concrete subjected to the test, at least 115% of the concrete
Water reduction	Water reduction in the tested concrete, at least 12% compared to the concrete
Air content of fresh concrete	The amount of air in the tested concrete mix is not more than 2% (by volume) of the concrete mix.
Increase in consistency	The increase in slump is at least 120 mm, starting with (30±10) mm, The increase in spread is at least 160 mm, with the initial (350±20) mm
Consistency preservation	The consistency of the tested concrete 30 minutes after the chemical admixture is added should not fall below the initial consistency of the concrete.
Effect on corrosion	It covers only the components given in EN 934-1:2008, Annex A.1.

Our products do not contain dangerous substances.