

MS-5-FP PC and PP Fiber Modified Silica Fume Gel

MS-5-FP improves the rheological properties of concrete. It is based on a highly pozzolanic mineral admixture that reduces water absorption and increases the compressive strength. Workability retention is special properties of MS-5-FP. High range water reduction is one of the most exceptional properties of MS-5-FP.

MS-5-FP comprises the following chemicals:

1. Silica fume
2. New generation super plasticizer based on modified polycarboxylic (PC) polymers
3. PP Fiber

This advanced-technology product can be controlled using the following standards:

ASTM C1202

BS EN 12390-8, BS 1881-122

APPLICATION

- Produces High Strength Concrete (HSC) in special conditions (high dynamic loads)
- Produces non-osmosis concrete for the regions exposed to chemicals attack
- Reinforced and non-reinforced concrete
- Dams, water and wastewater treatment, bridges, channels, etc.
- Hot weather concreting

ADVANTAGES

- Significantly reduces water-cement ratio
- Reduces cement content in concrete
- Increases workability and workability retention of concrete
- Increases flexural, tensile and compressive strength of concrete
- Achieve to early compressive strength of concrete
- Improves pumpability of concrete and reduces damages to concreting equipment
- Improves concrete consistency
- Enables economies in mix designs to be achieved when special conditions such as chemicals attack, dynamic load, etc.
- Considerably reduces permeability
- Increases durability of concrete
- Increases the abrasion resistance of concrete
- Reduce the risk of cracks in concrete
- It makes it possible to produce concrete with w/c ratio below 0.35

DOSAGE

The optimum dosage of MS-5-FP can be determined by trials in the site. Depending on concrete mix design (concrete type, workability, compressive strength, sizes and types of aggregates, cement content, water/cement ratio, ambient temperature and concreting conditions), a dosage of between 2.0 and 10.0 percent by weight of cement is recommended.

For use with other range of dosage, contact ABADGARAN Technical Services Department.

Note: please contact our engineering office in case of simultaneously use of more than one admixture.



DIRECTION OF USE

MS-5-FP can be added to concrete in two ways:

1-MS-5-FP could be added to ready-mix concrete before placing concrete.

2-MS-5-FP could be added to a part or whole of concrete mixing water then added to the concrete mix.

PHYSICAL AND CHEMICAL PROPERTIES

Physical state : Slurry

Specific gravity : $1.39 \pm 0.05 \text{ g/cm}^3$

Color : Grey

STORAGE

Shelf life: 1 year in the original package

Storage condition: should be protected from direct sunlight and frost. Keep pail in the temperature range between $+10^\circ\text{C}$ and $+30^\circ\text{C}$

Packing: 24 kg pail

HEALTH AND SAFETY

This product does not contain any substances hazardous to human health and the environment. However, it should not be swallowed and contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water. MS-5-P is not flammable. For further information refer to the material safety data sheet. MSDS is available at ABADGARAN website.

TECHNICAL SERVICE

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

