

FARCOMENT N50

Water Reducing and Plasticizing Admixture

Product Description

FARCOMENT N50 is normal water reducing and plasticizing based on highly purified lignosulphonate for concreting with limited slump retention properties. FARCOMENT N50 reduces the water required for the same slump concrete by at least 5 percent therefore great impermeability, reduced shrinkage and higher compressive strength concrete is achieved. It also can be used to significantly increase slump without increasing water content to produce more plastic and flowable concrete. It also may be employed to achieve a combination of these two objectives, slump increase with water reduction content.

● Mechanism of Action

FARCOMENT N50 is adsorbed on to the cement particles and lowers the interparticle attraction so that flocs of cement break up. This produces a more uniform dispersion of cement grains reducing the amount of water needed to achieve a given paste viscosity.

FARCOMENT N50 increases the gel content of the concrete. The increased gel content adds to the water retention and internal cohesiveness of the mix, reducing bleeding and segregation as it increases workability and placeability.

● Application

· It is recommended for use in all types of

concrete

- including:
- Flat work concrete
- Architectural concrete
- General purpose ready mixed concrete
- Concrete containing such pozzolanic materials as fly ash , silica fume and slag.

● Advantages Plastic Concrete

- Improved finish ability
- Improved workability
- Reduced water requirement
- Easier and faster pumping of concrete
- Reduced segregation at a given slump

Hardened Concrete

- Increased strength at all ages
- Greater impermeability
- Improved finished appearance
- Reduced shrinkage and cracking
- Increased concrete durability and uniformity

● Standard Compliance

FARCOMENT N50 complies with:

- ASTM C 494 -Type A
- EN 934 -2 -Table 2
- ISIRI 2930 -Table 2

● General Properties

Chemical Composition	Purified lignosulphonate
Ionic nature	anionic
Appearance	Brown liquid
Specific Gravity	1.18±0.02
Chlorides (PPM)	500 max

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● Dosage

- FARCOMENT N50 is normally dosed at a rate of (0.2%-0.9%) of cementitious materials.
- Dosage recommendations depend on the characteristics of the mix design.
- Field testing is recommended to determine optimum dosage and effects on both plastic and hardened concrete properties, such as: workability and workability retention, setting time, early and ultimate strength.

Effects of over dosing

The amount of water reduction or gain in workability will increase with increasing dose, any over dosing which is significantly in excess of that intended can in certain circumstances, result in significant retardation and or a degree of air entrainment. Extra curing is essential to prevent the surface drying out before setting. Where there is air entrainment the gain in strength and the other properties will develop normally after the initial retardation period.

● Method of Use

- FARCOMENT N50 is supplied ready for use and is completely miscible in water.
- It can be added in to the mixer at the same time as the mixing water.
- It should not be added directly to the cement or dry materials.
- FARCOMENT N50

may be added at the end of mixing process by dispensing equipment or it may also be added to the concrete in a drum of ready mix truck, it should be mixed at least 1 minute per m³ of concrete at high speed.

● Compatibility

With Cements

FARCOMENT N50 is suitable for use with cement replacement materials e.g. Fly ash, silica fume and blast furnace slag cement concrete.

With other Admixtures

FARCOMENT N50 should not be premixed or used with other admixtures unless receive the approval from manufacturer. We would recommend that SHIMI-SAKHTEMAN be consulted in such circumstances.

● Packaging

FARCOMENT N50 is supplied in 20kg gallons and 250kg drums.

● Storage

Storage is recommended to keep within the range of 5°C to 40°C. If product has frozen, thaw and agitate until completely reconstituted.

Keep out of direct sunlight.

● Shelf life

12 month when N50 is kept under the recommended conditions and stored in unopened and undamaged original sealed containers.

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● Safety and Handling Precautions

FARCOMENT N50 is a low- hazard substance it does not irritate skin and retina under normal conditions.

But in the line with general handling precautions to avoid contact with skin or eyes, pro-

tective gloves and goggles should be worn.

● Technical Service

The SHIMISAKHTEMAN technical Service Department is available to assist you in the concrete problems in the field and correct use of our products.



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