Concrete

Product Description

FARCOPLAST P10N is a new generation super plasticizer based on polycarboxylate technology. This product is designed to provide the highest performance of water reduction and limited slump retention properties.

FARCOPLAST P10N is suitable for use in precast and ready mix concrete, providing an exceptional fluidity and improving the flow properties of the mix by breaking up cement aggloromates

Mechanism of Action

The two most important mechanism attributed to dispersion in polycarboxylate systems are linked to polymer adsorption and steric hindrance caused by the thickness of the adsorbed polymer layer on to the cement particle and repulsion through induced electrical electrostatic charge.

Applications

FARCOPLAST P10N is recommended for use in all types of concrete including pumped, precast, silica fume, fly ash, extruded, prestressed, underwater, flowable and self-compacting concrete.

Advantages

- · Provides a cohesive non-segregating concrete mixture
- ·Produces high slump concrete at low dosage with no strength loss

- ·Fast strength development
- ·Reduces placing and consolidation time and labor expenses
- ·Reduces curing time and faster reuse of forms
- \cdot Improves impermeability against sulfate , chloride and water due to reduced water content
- \cdot Improves abrasion and frost resistance by decreasing W/CM
- ·Increases concrete durability, uniformity and strengths at all ages

Standard Compliance

FARCOPLAST P10N complies with

- · ASTM C 494 Type F
- ·ISIRI 2930 -Table 3, 4
- ·EN 934-2 -Table 3.1 / 3.2

General Properties

C1 : 1	M - 1:C: - 1
Chemical	Modified
Composition	polycarboxylate ether
Ionic nature	Anionic
Appearance	Opaque greenish liquid
Specific Gravity	Typically 1.1±0.02 at 20°c
Chlorides (PPM)	500 max

Dosage

- •FARCOPLAST P10N is normally dosed at a rate of (100-1600gr) per 100kg of cementitious materials (0.1-1.6.%) by weight of CM.
- \cdot Dosage recommendations depend on the characte ristics of the mix design.
- ·Field-testing is recommended to deter-





mine the optimum dosage and effect on both plastic and hardened concrete properties such as: workability and workability retention, setting time, early and ultimate strength.

Method of use

- •FARCOPLAST P10N 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.
- •FARCOPLAST P10N 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

FARCOPLAST P10N is suitable for use with cement replacement materials e.g. fly ash, silica fume, and blast furnace slag cement concrete.

With other Admixtues

FARCOPLAST P10N 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

FARCOPLAST P10N is supplied in 20kg gallons 220kg drums and 1100 kg IBC tanks.

Storage

FARCOPLAST P10N 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 P10N is kept under the recommended conditions and stored in unopened and undamaged original sealed containers.

Safety and Handling Precautions

FARCOPLAST P10N is a product classified as harmless, but in the line with general chemical handling precautions to avoid contact with skin or eyes, protective 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.

