



# FARCO PLAST M20R

## High Range Water Reducing and Retarding Admixture

### Product Description

FARCOPLAST M20R is a high range water reducing and retarding admixture formulated to produce flowable concrete with extra workability and excellent workability retention to enable large or difficult pours to be made.

### ● Effects on concrete workability

The fluidified concrete remains workable for approximately 1-2 hours at 20°C. The duration of workability depends not only on the temperature but also on the type and brand of cement, the nature of the aggregates, the method of mixing, the method of transportation and the amount of added admixture

### ● Application

- General purpose ready mix concrete
- Mass concrete
- Architectural concrete
- Recommended for workable and highly workable concrete with stable workability over period of time.

### ● Advantages

- Suitable for hot weather concreting
- High slump retention over prolonged periods of time
- Extended setting time avoid cold joints in large pours
- Allows more time for placement and com-

paction

- Decreased heat of hydration
- Reduced discharge and turn around time for trucks
- Can produce lower product costs with the superplasticizer to job site condition including faster and easier placement, enhanced finish ability and reduced curing costs
- FARCOPLAST M20R improves the rheological and mechanical properties of concrete; i.e. workability, compressive and flexural strength and modulus of elasticity.
- Improves impermeability to reduce sulfate attack

### ● Standard Compliance

FARCOPLAST M20R complies with:

- ASTM C 494 Type G
- EN 934 part2
- ISIRI 2930

### ● General Properties

|                      |  |
|----------------------|--|
| Chemical Composition | Blended of modified sulfonated naphthalene formaldehyde condensate |
| Ionic nature         | Anionic  |
| Appearance           | Brownish liquid  |
| PH                   | 7-9  |
| Specific Gravity     | Typically 1.2-1.25 at 20°C   |
| Chlorides (PPM)      | 500 max  |

### ● dosage

- FARCOPLAST M20R is normally dosed at a rate of 500gr - 2000gr per 100kg of cementitious materials (0.5%-2% by weight of CM).

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- Use of upper end of these ranges may result in severe extended set.
- Higher dosages may be utilized for special conditions and applications.
- Field testing is recommended to determine 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 M20R 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 M20R 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 2 minutes at high speed.

## Compatibility

### With cements

FARCOPLAST M20R is suitable for use with cement replacement materials e.g.

Fly ash, silicafume, blast furnace slag cement concrete.

### With other Admixtures

FARCOPLAST M20R should not be premixed or used with other admixtures unless re-

ceive the approval from manufacturer. We would recommend that SHIMISAKHTEMAN be consulted in such circumstances.

## Packaging

FARCOPLAST M20R is supplied in 20kg gallons and 250kg drums.

## Storage

- FARCOPLAST M20R should be kept from freezing.
- If accidentally frozen, its properties can be restored by thawing and thorough mixing by mild agitation.
- Protect from extremes of temperature
- It is best stored at temperatures between 5°C and 40°C

## Shelf life

12 month when M20R is kept under the recommended conditions and stored in unopened and undamaged original sealed containers.

## Safety and Handling Precautions

FARCOPLAST M20R is a mildly alkaline material direct contact may cause irritation of eyes.

Prolonged contact may cause skin irritation. May be harmful if swallowed do not get in eyes; avoid prolonged skin contact. Wash thoroughly after handling.

## 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.

