

# Concrete super plasticizer retarder and water reducer

# (Superplast NR 410)

## Description

This product is based on a modified Naphthalene-formaldehyde. In addition to superplasticizing the concrete, it can lead to delay in concrete setting and is useful for warm areas.

## Advantages

- •Increasing the workability so that the need for vibration is highly reduced
- •Reducing the amount of water up to 25%
- •Increasing the concrete pressure resistance and bending resistance
- •Increasing the paste properties of the concrete
- •Even dispersion of cement in the concrete and having a homogenous concrete
- •Highly compatible with micro silica and fly ash and other pozzolans
- •Compatible with various kinds of Portland and anti-sulfate cements
- •Appropriate for bulky concreting in warm areas
- •Appropriate for transportation due to its retarding properties

## Dosage

The exact dosage is specified with regard to building materials, the design requirements and concreting conditions which are determined by laboratory tests. However, a dosage between 0.6 to 2 % of the cement weight is recommended. In a concrete containing micro-silica the dosage could be increased up to 2.5 %

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#### How to use

In laboratory: Dissolve the specified amount of superplast NR410 in water and pour it into the concrete which is being made and allow it to mix with water for 2 or 3 minutes.

In workshop: Add the specified amount of superplast NR410 while the concrete is being made. If the concrete is ready-mixed, add the Superplast NR 410 from the terminal opening of the mixer and allow the mixing process to continue 90 turns. Nonetheless, if you intend to reach the maximum effect, add superplast NR410 to the concrete which is being made.

As superplast NR410 does all its chemical reactions in water, avoid pouring it on dry materials.

### Specifications

Color: brown

Appearance: liquid

No chlorine ion

Density:  $1.15 \pm 0.02$ 

Shelf Time: keep in sealed containers out of direct sunlight for 1 year

Freezing Point: zero degree of Celsius. In case of freezing, heat it gently to be recycled.

**Packaging and Maintenance**: keep in no.20 liter gallon and 220-liter barrels and tanks. It must be kept in sealed containers in covered areas out of sunlight.

## Safety points:

Superplast NR410 contains no toxic or flammable materials, however, if you touch it wash your hands or other parts of the body with water.

#### Standards

In compliance with ASTM C-494 standard, European EN-934-2 standard, and Iran 2930 standard.

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