

# **ULTRA SUPER PLAST 470**

# **Dynamic Water Reducing Admixture**

### Description

**ULTRA SUPERPLAST 470 Superplasticizer** is our latest generation of advanced organic polymer dispersants used to modify Portland cement grout or concrete.

lowers water demand and increases slump without having slump loss associated with other Superplasticizers. ULTRA SUPERPLAST 470 is ideal for use in any concrete where it is desired to keep the water/cement ratio to a minimum and still achieve the degree of workability necessary to provide easy placement and consolidation.

#### Where to Use

Use with Portland cement grout and mortar, where high flow is needed. Bridge decks, parapets, air ports, dames, parking garage decks and ongrade highways are some of the places where ULTRA SUPERPLAST 470 can be used.

- To significantly reduce the water consumption of a concrete mix.
- · Improve workability
- Increase early and ultimate strengths without additional cement.
- Particularly suitable for increasing workability of readymixed concrete at higher temperatures.
- To reduce concrete permeability, reduce water penetration and enhance durability.

Benefits Highly efficient, producing high slump concrete at very low dosage with no loss in strength

- Holds slump for long times without loss with near neutral set time
- Excellent water reduction
- High physical strengths
- Reduces bleeding and segregation
- Reduced shrinkage
- Non Corrosive
- Use in production of flowing concrete allows easier construction with rapid placing and compaction resulting in reduced labor costs.
- Chloride free
- Increase strength

Technical support

Ultra Chemicals provides a full technical advisory service.

ASTM C494 as type A, F and G

Typical dosage

Trail mix should used to maximize the benefits.

The normal dosage range is from 0.80 to 1.80 litres/100 kg of cementitious material

For higher workability concrete dosage range should be from 0.50 to 2.00 litre/100 kg of cementitious material.

Use at other dosages

Contact the Ultra Chemicals Customer Service Department for advice in these cases.

**Properties** 

Appearance: Brown liquid

Specific gravity: Typically 1.155 at 20°C

Chloride content: Nil to BS 5075

Air entrainment: Typically less than 3% additional air Is entrained at normal dosages.

Alkali content: Typically less than 72.0 g. Na₂O

Equivalent/liter of admixture. A fact sheet on this subject is available.

**PACKAGING** 

Ultra superplast 470 is packaged in bulk, 210 Liters, 30 Liter

## Instructions for use

**Mixing patterns** 

Initial trials should be done with normal concrete. After initial trials, a minor modifications to the overall mixture may be made as needed to optimize performance.

More efficient use of mixing water will improve mix cohesion. The slight air entrainment obtained with Ultra superplast 470 wills also help to minimize bleeding and segregation.

Dispensing

The accurate quantity of Ultra superplast 470 should be measured by means of a recommended dispenser.

Contact the Ultra Chemicals Customer Service Department for advice regarding suitable equipment and its installation.

Effects of overdosing

An overdose will result in an increase in retardation.

Over-dosage may also cause increased air entrainment, which tends to reduce strength.

Curing

Good curing practice should be maintained especially in the case of an overdose. Water or Ultra Cure 603 spray should be applied.

#### Storage:

Avoid to place direct to sun light and always store in shady areas.

ISO Certification:

Our production facility at Pakistan is ISO 9001:2008 ISO 14001:2004 by BUREAU VERITAS and UKAS Management

Note: Dosage rate may be changed as per requirements of concrete mix, on consultation of Ultra technical staff. Over dosage can cause retardation.