



# ALFAPLAST SP 970 (M)

**High performance superplasticizer for slump retention and high strength concrete**

## DESCRIPTION

ALFAPLAST SP 970 (M) is a chloride free high performance superplasticizer for slump retaining admixture based on specially selected and blended organic polymers materials. The product enhances the flow and ease of handling during the placement of concrete. It reduces water content without sacrificing workability.

ALFAPLAST SP 970 (M) disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively. ALFAPLAST SP 970 (M) does not contain calcium chloride or any other ingredients that would promote the corrosion of steel.

## USES:

ALFAPLAST SP 970 (M) considerably improves concrete properties and is good for:

- ◆ High strength concrete.
- ◆ Pumped concrete.
- ◆ Pre-stressed and reinforced concrete.
- ◆ Hot weather concreting for long transportation.
- ◆ Ready mixed and mass concrete pours.
- ◆ Structures like industrial slabs, high-rise buildings, tunnels, pre-cast concrete, bridges and infrastructure projects are some of the places where ALFAPLAST SP 970 (M) can be used.

## ADVANTAGES:

- ◆ Highly efficient, producing high slump concrete at very low dosage with no loss in strength.
- ◆ Reduces placing problems in hot weather condition.
- ◆ Reduces cracking and permeability of hardened concrete.
- ◆ Improves cohesive properties of concrete to reduce segregation and bleeding.
- ◆ Allows workability to be increased without adding extra water, suitable for high workability concrete.
- ◆ Water reduction significantly improves compressive strength at all ages and enhances durability through the production of low permeability concrete.
- ◆ Lower pumping pressures.
- ◆ Ready mix concrete where workability retention coupled with retardation in initial set.
- ◆ Reduces thermal peaks.
- ◆ Enhances surface finish and surface appearance.

## STANDARDS:

ASTM C494	Type B, D, F & G
BS 5075	Part 1
WRC	Used in portable water

## TECHNICAL SUPPORT:

Al Falah Chemicals provides a technical advisory service for on-site assistance and advice on mix design, product selection, evaluation trials and dispensing equipment.

## DOSAGE:

The optimum dosage of ALFAPLAST SP 970 (M) to meet specific requirements should always be determined by trials with different combinations of concrete ingredients. The normal dosage range is 0.50% to 1.50% by weight of cementitious material. For high performance concrete consumption, the dosage range is 1.50% to 2.50% of total cementitious material.

## DIRECTIONS FOR USE / APPLICATION:

ALFAPLAST SP 970 (M) can be added to the initial batch water or directly on the freshly batched concrete. However, better results have been observed batching directly on the freshly batched concrete. It should not come into contact with dry cement or other admixtures until mixed thoroughly with the concrete batch. For "flowing" concrete, charge all concrete material into the mixer and mix five minutes or 70 revolutions to the initial specified slump. Add ALFAPLAST SP 970 (M) and mix an additional 3 minutes.

## TECHNICAL DATA

<b>Appearance</b>	Brown Liquid
<b>Specific Gravity</b>	Typically 1.16 - 1.18 @ 25°C
<b>Air entrainment</b>	Typically less than 2% additional air is entrained at normal dosages.
<b>Alkali content</b>	Typically less than 5.0 g. Na <sub>2</sub> O Equivalent / litre of admixture.

## PACKING:

Supplied in	Drum / IBC Tank
Storage	Dry, Frost free, out of direct sunlight.
Shelf life	12 months, when stores as above
Hazard class	No dangerous goods. Observe Material Safety datasheet

## COMPATIBILITY:

ALFAPLAST SP 970 (M) is compatible with all types of cement complying with international standards. It can be used in combination with the following admixtures and additives.

- ◆ Air entraining admixtures
- ◆ Anti-freezing admixtures
- ◆ Pozzolan (Micro silica, fly ash, GGBFS)
- ◆ Synthetic fibers
- ◆ Alkali silica reaction control admixtures
- ◆ Waterproofing admixtures

CONCRETE ADMIXTURES	SPECIAL ADMIXTURE	SURFACE TREATMENTS	GROUTS & ANCHORS	CONCRETE REPAIRS
INDUSTRIAL FLOORING	SHOTCRETE	WATERPROOFING	JOINT SEALANTS & WATERSTOPS	INDUSTRIAL ADHESIVES

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## STORAGE / SHELF LIFE

This Product must be stored where temperatures do not drop below +5°C, If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature.

Shelf life is 12 months when stored as above.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage consult your local Alfalah representative.

## PRECAUTIONS

### Health and Safety

This product does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

For further information consult the Material Safety Data Sheet available for this product.

## FIRE

This product is waterbased and non-flammable

## STATEMENT OF RESPONSIBILITY (Disclaimer)

The technical information and application advice given in this Alfalah Chemicals publication are based on the present state of our best scientific and practical knowledge. The information herein is of a general nature, no assumption can be made as to product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

## NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Alfalah Chemicals either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Alfalah Chemicals, are responsible for carrying out procedures appropriate to a specific application.

### HEAD OFFICE

G-1, Yousuf Chamber,  
Union Comm. Area,  
Shahrah-e-Faisal, Karachi,  
Pakistan - 75350

Tel: +92 21 34320751 - 3

Email: info@alfalahchemicals.com  
shcorp@cyber.net.pk

### LAHORE OFFICE

SE-38, R-33-A,  
Akbari Mandi,  
Circular Road, Lahore,  
Pakistan - 54030

Tel: +92 42 37379450

Email: saleslhr@alfalahchemicals.com

Certified member of:



American Concrete Institute

[www.alfalahchemicals.com](http://www.alfalahchemicals.com)

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