

## Cormix® SP1

### HIGH RANGE WATER REDUCING SUPERPLASTICISER

#### DESCRIPTION

**Cormix SP1** is a highly effective water reducing superplasticiser and an extremely powerful deflocculating agent, it operates by dispersing cement in to its primary particles which dramatically increases the flow characteristics of the cement paste. Based on the soluble salt of a polymeric sulphonate it conforms to Type A and F materials of ASTM C494 and BSEN 934-2 1998

#### USES & ADVANTAGES

Uses include to produce flowing concrete for large pours and precast elements. **Cormix SP1** may also be used where substantial water reductions are required to provide high early and ultimate strengths e.g. in precast factories.

##### Advantages include:

- High strength concrete produced at normal workability and cement contents. The resultant concrete is of a dense impermeable nature.
- Substantial increase in workability without additional water.
- Normal setting without retardation.
- Very good early strengths.
- Significant strength increases.
- Increased production in precast yards.
- Better surface finish.
- Waterproof concrete may be achieved.
- Better resistance to wear & abrasion.
- Chloride free.
- Reduced shrinkage & creep.
- Suitable for hot climates.
- Improved water borne salt resistance.

#### PROPERTIES

**Appearance:** Brown liquid

**Chemical:** Napthalene Formaldehyde Sulphonate

**Specific Gravity:** 1.18 - 1.20 approx. at 20°C

**pH Value:** 7-9

**Chloride Content:** Nil

##### Compatibility with Cements:

**Cormix SP1** can be used with all types of Portland Cement and pozzolanic materials.

**Cormix SP1** is compatible with P.F.A., G.G.B.F.S. and Silica fume. For use with special cements we recommend that you consult Cormix International Ltd.

##### Compatibility with Other Admixtures:

**Cormix SP1** should not be premixed with other admixtures. Consult Cormix when using other admixtures.

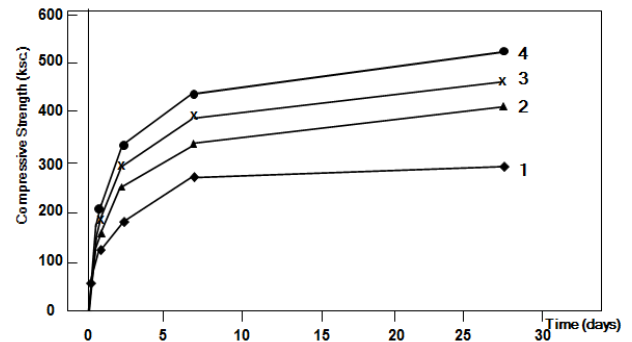
#### METHOD OF USE / APPLICATION

**Cormix SP1** is supplied ready for use, it should be added to concrete mixes during the mixing process at the same time as the water or the aggregates. It should not be added directly to the cement.

#### DOSAGE

0.5 - 3.0 litre per 100 kg of total cementitious material. Exact dosage rates should be determined by trial mixes.

#### TYPICAL STRENGTH DEVELOPMENTS USING CORMIX SP1



Development of compressive strength with different dosages of **Cormix SP1**.

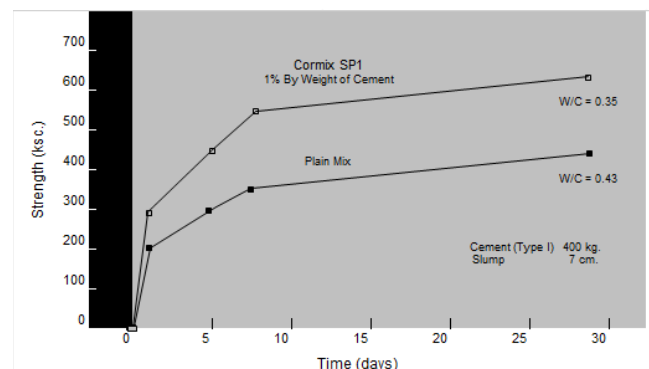
Concrete: Cement Type I = 380 kg/m<sup>3</sup>

Consistency: Slump 8 cm for all mixes

Temperature 30°C

No.	Dosage Cormix SP1	W/ C
1	None	0.50
2	0.50%	0.44
3	1.00%	0.37
4	1.50%	0.35

#### Cormix SP1 - High Early Strength Reduced W/C = 0.35 Temp. 30°C



#### EFFECTS OF OVER-DOSING

Over-dosing of **Cormix SP1** will generally produce a considerable increase in workability. Providing over dosed concrete is properly cured the ultimate strength will generally be higher than of a normal concrete.

**Cormix® SP1****HIGH RANGE WATER REDUCING SUPERPLASTICISER****PACKAGING**

**Cormix SP1** is supplied in 200 litre steel drums. Alternatively bulk deliveries can be arranged.

**STORAGE & SHELF LIFE**

**Cormix SP1** should preferably be stored protected from frost. If the product does become frozen it should be carefully mixed after thawing out, to restore it to its normal state.

**Cormix SP1** can also be stored under high, ambient temperatures, without any adverse effect on its performance.

The shelf life is at least 12 months when stored in original unopened containers.

**HEALTH & SAFETY**

**Cormix SP1** is formulated from chemicals which present no fire or health hazards.

Do not take internally. If on skin wash off with soap and water. If in eyes wash out with copious amounts of water and seek medical attention.

For further information consult Cormix International Ltd.

**TECHNICAL SERVICE**

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

**QUALITY ASSURANCE**

ISO 9001 : 2015 verified by TUV Nord.

ISO 14001 : 2015 verified by Lloyd's Register International.

**DISCLAIMER**

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, curing, crushing procedures etc.

Cormix does not take responsibility nor need to defend others testing that does not achieve the published data.

The user must test the products suitability for the intended application and purpose. Cormix reserves the right to change the properties of the product.

Site conditions and differences in materials are such that no warranty or fitness for a particular purpose, nor liability can be inferred from the published data sheet, written recommendations or from other advice offered.

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