

## HIGH RANGE WATER REDUCING SUPERPLASTICISER

### DESCRIPTION

**Conmix 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. **Conmix 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:

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

**Conmix 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:

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

### METHOD OF USE / APPLICATION

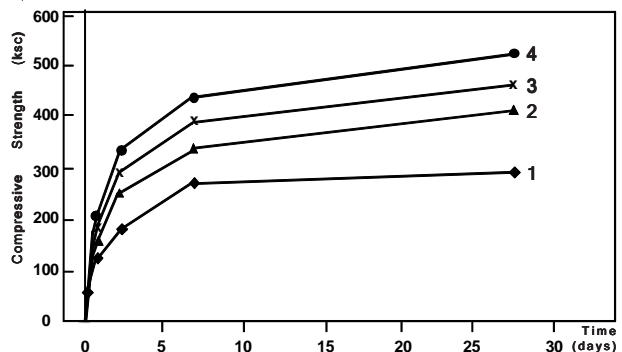
**Conmix SP1** is supplied ready for use, it should be added to concrete mixes during the mixing process at the same time as the water or the aggregates. It should not be added directly to the cement.

### DOSAGE

0.5 - 3.0% by weight of cement.

Exact dosage rates should be determined by trial mixes.

### TYPICAL STRENGTH DEVELOPMENT USING CONMIX SP1

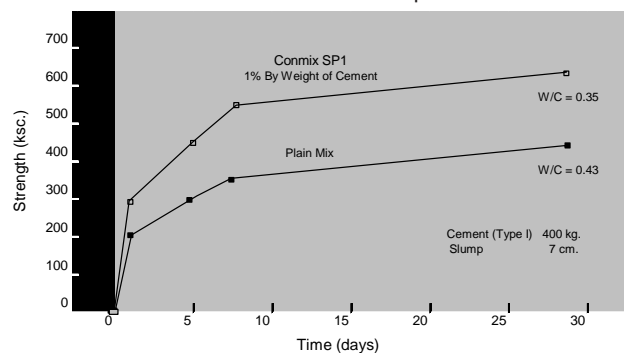


Development of compressive strength with different dosages of Conmix SP1.  
Concrete : Cement Type I = 380 kg/m<sup>3</sup>  
Consistency : Slump 8 cm for all mixes  
Temperature 30°C

No	Dosage Conmix SP1	W/C
1	None	0.50
2	0.5%	0.44
3	1.0%	0.37
4	1.5%	0.35

### Conmix SP1 - High Early Strength

Reduced W/C = 0.35 Temp. 30°C



### EFFECTS OF OVER-DOSING

Over-dosing of **Conmix 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.

### PACKAGING

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

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### STORAGE & SHELF LIFE

**Conmix 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.

**Conmix 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

**Conmix 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 : 2008 verified by TUV Nord.

### CONTACT DETAILS

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**NOTE :** Every reasonable precaution is taken in the manufacture of all CORMIX-products to ensure that they comply with CORMIX's high standard of quality. The recommendations and properties of the product are based upon what is believed to be the most reliable information available, and are not intended as recommendations which infringe on other patents. Although all CORMIX-products are subject to rigid quality tests, no specific guarantee can be given, because results depend, not only on quality, but also on other factors beyond our control. We welcome therefore consultation in the event of doubt concerning application, or performance, and point out that oral recommendations, which vary from the instructions contained herein, are not binding without written confirmation by CORMIX. All transactions shall be subject to our terms and conditions of sale-delivery-and-service. This data sheet supersedes the previous one and a reprint may be issued without notice to supersede this edition, as and when deemed necessary. The information given in this leaflet is to the best of our knowledge true and reliable. Field service where provided does not constitute supervisory responsibility. Our guarantee is therefore limited to the quality of materials delivered.