

## **Cormix** ® R1

## WATER REDUCING PLASTICISING AND RETARDING CONCRETE ADMIXTURE

#### **DESCRIPTION**

**Cormix R1** is a liquid retarding and water reducing agent, used to improve the workability of concrete mixes or to permit effective reductions in the free water content.

**Cormix R1** is formulated from carefully selected raw materials and is manufactured under controlled conditions to give a consistent product. It is based on a modified organic agent and complies with ASTM C494-81 Type B and D, BS EN934 Part 2

#### **USES & ADVANTAGES**

**Cormix R1** is used where high quality concrete is required, for example, in hot climates in the production of ready mix concrete, site concrete and R.C.C.

#### Advantages include:-

- Extension of slump in high temperatures.
- Workability improvement to most types of concrete mixes.
- · Increased strengths.
- · Reduced water without loss in workability.
- · Can be used for pumped concrete.
- · Increased setting times in high temperature.
- · Effective in achieving cement economies.
- · Improves surface finishes and overcomes blemishes.

#### **PROPERTIES**

Appearance: Dark brown liquid
Specific Gravity: 1.16 - 1.18
Air Entrainment: 1 - 2%

pH Value: 4-5
Chloride Content: Nil
Compatibility with cements:

**Cormix R1** can be used with all types of Portland Cement and pozzolanic materials such as P.F.A.,

G.G.B.F.S. and Silica fume. For use with special cements we recommend that you consult Cormix International.

## Compatibility with other admixtures :

**Cormix R1** should not be premixed with other admixtures. The performance of the material may be affected by the presence of other chemicals and we would recommend that Cormix International Ltd. Be consulted in such circumstances.

## **METHOD OF USE**

Cormix R1 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. No extension of normal mixing time is necessary.

#### **DOSAGE RATES**

The performance of **Cormix R1** is best assessed after preliminary tests on site using the actual concrete under consideration to determine the optimum dosage and on properties such as compressive strength, setting times, shrinkage etc. when these are of consequence.

As a guide to these trials, an addition rate of 0.2 - 0.5 litre per 100 kg of total cementitious material, is recommended for standard RMC. For concretes such as Roller Compacted Concrete dosages as high as 1.0-1.5 litre per 100 kg of total cementitious material. This rate of addition can be varied to give different results. For advice and assistance with your trials we would recommend that you consult Cormix International.

#### **EFFECTS OF OVER-DOSING**

Over-dosing of **Cormix R1** will cause an extension of initial setting time. If this happens consult Cormix.

If intentional or accidental increases above the recommended addition rate are employed, care must be taken to allow for the effect on the stripping of formwork. In such cases, however, provide the concrete is properly cured, the ultimate strength will generally by higher than for normal concrete.

#### **PACKAGING**

**Cormix R1** is supplied in 200 litre steel drums. Alternatively bulk deliveries can be arranged.

## **STORAGE & SHELF LIFE**

**Cormix R1** 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.

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

#### **HEALTH & SAFETY**

Cormix R1 is formulated from chemicals that 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



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#### **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 advise offered.

#### **CONTACT DETAILS**

**Cormix International Limited** 

89 Romklao Rd., Sansab, Minburi, Bangkok 10510 Tel. (66 2) 917 3955-8

Fax. (66 2) 917 3959 http://www.cormix.com E-mail: info@cormix.com

