Concrete Admixtures - Mid-Range Water Reducers

EUNICEM P9

Mid-Range Concrete Plasticizer





Product Description

EUNICEM P9 is a liquid concrete plasticizer, or water reducing agent, used to improve workability of concrete, or permit effective reductions in free water content. It is an extremely versatile product, producing excellent slump retention properties, over a wide range of cement contents. EUNICEM P9 is effective over a wide range of dosage levels, giving the desired effect in concrete without producing any detrimental retardation results. EUNICEM P9 is formulated from carefully selected raw materials and is manufactured under controlled conditions to give a consistent product. It is based on a high performance lignosulphonic acid derivative and depending on dosage rate conforms to Type A and D materials of ASTM designation C494 and complies with BS 5075, Part 1.

Advantages

• EUNICEM P9 can be utilized to modify concrete mix designs to give improved slump retention and allow more time for placement and compaction.

- Permits excellent water reduction, resulting in improved concrete strengths and durability.
- Effective over a wide range of cement contents.
 At both low and high addition rates, EUNICEM P9 exhibits excellent retention of workability
- while giving limited set retardation properties. This is particularly prominent under hot weather conditions.
- EUNICEM P9 aids cohesion, especially when harsh mixes are used. This improves the surface finish of the concrete.
- Reduces bleeding and enhances the pumpability characteristics of the concrete.

• Effective over a wide range of dosage levels producing moderate to high compressive strength increases.

Typical Properties

Appearance: Dark brown liquid Specific Gravity: 1.20 at 20°C Air Entrainment: Air content will normally be increased by between 1% and 2% Chloride Content: Nil Freezing Point: 0°C Storage Life in Manufacturer's Drums: 12 months from date of manufacture. Bulk Storage: 12 months from date of delivery.

Compatibility

With cements: EUNICEM P9 can be used with all types of Portland, Pozzolanic and Blast Furnace cements. It can also be used with concrete containing fly ash and microsilica. With other admixtures: EUNICEM P9 should not be premixed with other admixtures prior to addition to the concrete mix. The performance of the product may be affected by the presence of other chemicals.

Method of Use

EUNICEM P9 is supplied ready for use. It should be added to concrete mixes during the mixing process, at the same time as the water. It should not be added directly to the cement. No extension of normal mixing time is necessary.

Addition Rates Range

0.2% - 1.2% by weight of cement. The performance of EUNICEM P9 is best assessed after preliminary tests on site using the actual concrete under consideration to determine the optimum dosage and effect on properties such as ultimate compressive strength, early rates of strength, and shrinkage when these are of consequence. As a guide to these trials, an addition rate of 200ml-1200ml EUNICEM P9 per 100kg cement is recommended.

Effects of Overdosing

Overdosing of EUNICEM P9 will generally produce a considerable increase in workability and in certain circumstances, a slight increase in air content. This particularly, in cold weather, will be accompanied by retardation of the initial and final set characteristics of the concrete. In such cases, however, provided the concrete is properly cured, the ultimate strength will generally be higher than that of normal concrete. The effects of overdosing will also be exaggerated when sulphate resisting cement is used to produce the concrete.

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into a mixer by means of automatic dispensing equipment details of which are available upon request.

Health and Safety

For further information see the EUNICEM P9 Material Safety Data Sheet, or consult our technical department.

Packaging

EUNICEM P9 is supplied in nominal 1000 liter returnable containers. Alternatively, bulk deliveries can be arranged.

Storage

EUNICEM P9 requires no special storage facilities.

Technical Service

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

Contact Information

Al-Faiha for Engineering Products techsupport@alfaihaengineering.com www.alfaihaengineering.com

v01-02-2022