



Kenal 8R

Water Reducing, Plasticizer / Retarder for Concrete

Description:

Kenal 50R is a versatile product which can be utilized to maintain workability and effect water reduction throughout a range of concrete mix designs and ambient temperature conditions.

Kenal 50R is a multi-role admixture capable of functioning as a water reducer to enable strength gains, whilst maintaining workability or set retardation.

Advantages

Reduces placing problems in hot weather concreting by improving workability and workability retention.

- Increases impermeability and durability
- Higher early and ultimate strengths
- Effective over wide range of cement contents
- Improves surface finish, pumpability and troweling
- Enables significant economies in mix designs to be achieved, thereby saving cement

Uses

- Hot weather concreting.
- To increase workability.
- To increase compressive strength.
- To reduce permeability

Typical Application

Kenal 50R is used wherever effective workability retention and maximum strengths are required such as:

- Hot weather concreting where controlled delays to initial set are beneficial.
- Ready-mix concrete where workability retention coupled with retardation of initial set are beneficial.
- In areas of congested reinforcement where high workability is of benefit.
- Above or below ground waterproofing where maximum impermeability and water tightness are essential.
- Use in combination with superplasticizers and fiber to extend concrete working life to over 3 hours.

Action

Kenal 50R acts efficiently on the cement particles by combining the effects of powerful plasticizing and deflocculating agents. It considerably improves the workability of concrete mixes without the addition of extra water. The improved dispersal of the cement particles ensures the process of hydration proceeds under optimum conditions.

Typical Properties*

Consistence	Liquid
Colour	Dark Brown
Chloride According to EN 934-2	Nil
Classification According to ASTM C494 and ASTM C1017	Type A, B, D And Type G
Specific Gravity	1.06±0.03@ 25°C
Air Entrainment	Less than 1.5%
pH (ISO 4316)	4.0 – 6.0
Alkali Content (EN 480-12) (%)	< 3

A Perfect Chemistry...A Durable Concrete

Application Guidelines

Kenal 50R should be added to the mix with the gauging water after sand, cement, and aggregate have been blended. Alternatively, **Kenal 50R** can be dispensed after the water has been added to the blended cement and aggregates.

Kenal 50R can be used with all types of Portland cement including Sulphate Resisting and modified cement (Type II). For use with special cements, contact **Kenal Chemical Pvt. Ltd.** Technical Services Department.

Kenal 50R should not be mixed with other admixtures. If other admixtures are to be used in concrete containing.

Kenal 8R, they must be dispensed separately. Consult **Kenal Chemical Pvt. Ltd.** Technical Services Department for advice.

Preparation

Kenal 50R acts efficiently to give controlled retardation of initial set. Setting times of concrete mixes are related to cement type and ambient temperature.

Dosage

The normal dosage range is 400ml to 1200ml per 100kg of cement. Higher dosages may be required when certain combinations of materials and conditions are present. In all cases we recommend trial mixes are carried out to determine the correct levels of admixture required to achieve the desired concrete properties

Effects of Over Dosage

A severe over dosage of **Kenal 50R** will result in the following:

- Retardation of initial and final set.
- Slight increase in air entrainment.
- Increase in workability.

Providing it is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete. The retarding effects of very high dosages will be exaggerated with SR cement.

Packing

KENAL 50R is available in IBC, 210-liter drums and in bulk tanks upon request.

Shelf Life

CASTECH 8R Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is up to 1 years when stored as above.

Fire:

KENAL 50R is non-flammable.

Precautions

Health & Safety:

KENAL 50R is non-toxic. Any splashes to the skin should be washed immediately with water. Splashes to the eyes should be washed immediately with water and medical advice should be sought.

Technical Support

Kenal Chemical offers full technical support package to specifiers, contractors and end users, as well as technical assistance on site and after sales consultations.

Ensure the container is available for the medical attendant to examine for any relevant instructions and content details. Reseal all containers after use and ensure product is stored as instructed on the safety section of the labelling.

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