

# OPTOMIX R42

## Set Retarding Admixture

### PRODUCT DESCRIPTION

**Optomix R42** is a specially formulated set retarding admixture based on a blend of high grade polyhydroxy carboxylic acid derivatives and synergistic active ingredients which provide controlled set of ready mixed concrete, screed and mortars. **Optomix R42** is normally used in building mortars in conjunction with an Oscrete Air Entrainer to produce a pre-mixed ready for use mortar with extended setting time and workable life.

### APPLICATIONS

**Optomix R42** is used to control and extend set times in concrete, screed and mortars and can be used to extend the workable life of mortar up to 72 hours, enabling the advantages of ready to use mortar systems to be maximised. Screeds can be produced and delivered with a workable life of a full working day.

### BENEFITS in Mortar & Screed

- Controlled workable life.
- Improved durability.
- Reduced Shrinkage.
- Freeze-thaw resistance.

### BENEFITS in Concrete

- Controlled setting times.
- Increased Strength.
- Longer working life.
- Multi use product.

### PROPERTIES

Nature:	Liquid
Appearance:	Clear Amber
Specific Gravity: (20°C)	1.14 g/cm <sup>3</sup>
pH:	10.5
Chloride Content:	< 0.10
Alkali Content (Na <sub>2</sub> O):	< 3.50

### ADDITION RATES

Dosage rates vary dependant on mix design, process, aggregate type and the desired effect but typically:

#### Mortar

1.50% by weight of cement & replacement will retard mortar for approximately 30—36 hours.

(2.25% for cement/lime mortars)

#### Screed & Concrete

100mls—1000mls per 100kg cement

(0.10% - 1.00% by weight of cement)\*

\* These dosages will increase the initial setting time of concrete by 2—10 hours above normal setting times dependant on weather and materials, trials to determine these facts must be carried out prior to starting any new contract.

### STANDARDS

**Optomix R42** complies with the requirements of BS EN 934-2 & BS EN 934-3 and is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.



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### COMPATIBILITY

**Optomix R42** is compatible with all types of EN 197 cement systems.

**Optomix R42** should not be premixed with other admixtures and should be batched separately.

### STORAGE

**Optomix R42** should be stored undercover and protected from extreme temperatures, if stored between the range 5°C to 30°C the product will have a minimum shelf life of 12 months.

### HANDLING

Please refer to the **Optomix R42** material safety data sheet but in line with normal handling procedures, personal protective equipment should be worn.

Refer to the Material Safety Data Sheet for full details.

### PACKAGING

200 litres drums, 1000 litre IBC's and bulk deliveries.

### NOTES

**Optomix R42** should be added with the water or at the end of the mixing process and not directly onto the cement. A mixing time of at least 30 seconds is recommended after the addition of the admixture.

If frozen **Optomix R42** may be used after thawing slowly at room temperature followed by intensive remixing.

**Optomix R42** if overdosed will result in an increase in workability and set retardation. The amount of increase will depend on the actual overdose, the temperature and the materials used, care should be made when overdosing to dispense the correct addition.

Please consult the OSCRETE technical department for advice on admixture selection.

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#### Disclaimer

The physical properties quoted are typical, and should not be taken as a specification. The information supplied in our literature is based on data and experience and is given in good faith. Our policy is one of continuous research and development and we reserve the right to update this information at any time; customers should therefore ensure they have the latest issue. Whilst we guarantee the consistent high quality of our products, we have no control over the circumstances in which our materials are used, site conditions or the execution of the work and are therefore unable to accept any liability for any loss or damage which may arise as a result thereof. Materials are supplied in accordance with our standard conditions of sale.

