

**Description**

OSPERSE RT01 is a specially formulated set retarding additive based on a polyhydroxycarboxylic acid. OSPERSE RT01 is a fine, free-flowing powder to improve dispersion in dry bagged cementitious and gypsum based systems.

**Action**

Retarders slow down the setting and early stiffening of cement and gypsum based systems, producing a prolonged working time by slowing down the initial reaction between hydraulic binders and water. Retarders work by reducing the rate of water penetration to the cement and slowing down the growth of hydrated products.

**Benefits**

- Increased workability time of cementitious and gypsum systems by controlled set.
- Hot weather problems reduced.
- Agglomeration during storage minimised with free-flowing powder. Sieving is not required prior to blending with cement, aggregates etc.
- White specks in the final applied product minimised by fine powder. Badly dispersed / agglomerated powder or crystalline grades generally cause surface blemishes.

**Use**

Osperse RT01 is used to control and extend the setting time of cement and gypsum based materials. It is recommended for use in systems based on Ordinary Portland Cement (OPC) and gypsum.

**Method of Use**

Osperse RT01 should be added to the mixer after the addition of sand and cement to provide adequate dispersion in the finished product.



## Typical Properties

### Appearance

White free-flowing powder

### Density

0.985 g/cm<sup>3</sup> (approximately)

### Addition Level

The natural variations in cements, hydraulic binders, gypsum, aggregates and ambient temperature all affect the addition level required for a given workability and retardation period. Trials should be carried out to determine optimum dosage levels. As an initial guide, an addition level of 0.25% by weight of cement and 0.15% in weight of gypsum is recommended. This may have to be adjusted depending on the retardation period required, raw materials and application.

High levels of Osperse RT01 will result in increased set retardation. The amount of retardation will depend upon the actual level, temperature, cement type and content. Over retarded hydraulic systems, if properly cured, will not be adversely affected after the set occurs with strength and durability unaffected. Excessive addition levels could permanently prevent hydration.

### Compatibility

Osperse RT01 is compatible with all OPC and hydraulic binders, including ground granulated

blast furnace slag, pulverised fly ash, hydrated lime and gypsum.

### Health & Safety

Avoid contact with skin or eyes. Protective goggles and gloves should be worn. Refer to Material Safety Data Sheet for full details.

### Storage

Osperse RT01 is a pressure sensitive powder and should be stored in cool, dry conditions. Sealed containers, if correctly stored, have a minimum shelf life of one year.

### Packaging

20kg returnable plastic pail with inner polyethylene liner.

#### 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.

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