

## Description

Opticast 540 is a specifically formulated product designed to meet the requirements of dry/semi dry concrete production and concrete block manufacture, by assisting the production process and improving the quality of the finished product.

## Application

The balanced properties of Opticast 540 will benefit processing by improving compaction, whilst maintaining consistency of the mix, improving the dispersal of pigments thereby enhancing colour density and giving reduced permeability of the finished product, leading to a reduction in the occurrence of efflorescence.

The use of Opticast 540 will enhance the strengths of units and blocks at all ages, including mixes containing ggbs and pfa.

It is used to improve the compaction and handling of all dry/semi-dry concrete mix processes. It is especially beneficial in the production of cast stone, also block paving, flags, tiles and other concrete products where an enhancement in colour and detail are required. The improved mix properties also result in reduced machine stress and parts wear.

## Benefits

Opticast 540 can be used in all manually cast and automated block production processes to give the following benefits:

- Reduced water absorbancy
- Improved compaction
- Improved processing
- Better surface finish
- Increase in strength at all ages
- Improved colour intensity and stability
- Reduced efflorescence

## Standards

Opticast 540 is formulated from a combination of materials and complies with the admixture requirements of BS 6717, Part 1, 1993 - Precast Concrete Paving Blocks.



All Christeyns products are produced in accordance with the ISO 9001:2000 Quality Management Standard and the ISO 14001 Environmental Management Standard.

### Addition Rates

Usage rates will depend upon the mix design, process and types of materials used but typically, will be in the range of 250 mls to 1,000 mls per 100 kgs cementitious content. For concrete block paving the typical addition rate would be;

300 mls per 100 kgs of cementitious content (0.3% [v/w] by weight of cement).

To achieve C.A.T. requirement higher dose may be required, typically 1%.

When pfa or ggbs is used addition rates may have to be increased. It is recommended that trials be carried out to determine the optimum addition rate.

Opticast 540 should be added during the mixing process just after, or at the same time as the water.

### Typical Properties

#### Nature

A combination product based on soluble carboxylic acids, naphthalene sulphonate, carefully selected surfactants and non-chloride accelerators.

#### Appearance

Amber liquid

#### Relative Density

1.03 gcm<sup>-3</sup> at 20°C

### Air Entrainment

Less than 1% additional air entrained, in dry and semi-dry mixes.

### Chloride Content

Nil (to BS5075)

### Stability

Avoid freezing

### Compatibility

Compatible with all types of Portland Cement

### Storage

Protect from extremes of temperature. Opticast 540 has a minimum shelf life of 1 year under normal conditions of storage.

### Handling

Opticast 540 is a non-hazardous material but in line with general chemical handling precautions to avoid contact with skin or eyes, protective gloves and goggles should be worn.

Refer to the Material Safety Data Sheet for Opticast 540 for full details

### Packaging

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

#### 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.

**OSCRETE is a division of Christeyns UK Ltd.**  
Rutland Street  
Bradford  
West Yorkshire  
BD4 7EA  
United Kingdom

Telephone: +44 (0)1274 393286

Fax: +44 (0)1274 309143

e-mail: [info@oscrete.co.uk](mailto:info@oscrete.co.uk)

Website: [www.oscrete.co.uk](http://www.oscrete.co.uk)