

# SIGMA 412

## Water Resisting Admixture

### Description

**Sigma 412** is a high active admixture formulated to reduce the permeability of concrete mixes. It is used to significantly reduce water absorbency.

### Applications

**Sigma 412** is based upon a stabilised dispersion of a blend of insoluble long chain fatty acid salts which form a permanent hydrophobic layer within the cast stone pore matrix.

### Benefits in Concrete

- Open texture blocks
- Lightweight blocks
- Masonry blocks
- Aerated blocks
- Block paving
- Ready mixed concrete

### Properties

Nature	Liquid
Colour	Milky White
Specific Gravity	1.02 g/cm <sup>3</sup>
pH	11.0
Chloride Content	<0.10%
Na <sub>2</sub> O equivalent	<1.00%

### Addition Rates

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

500mls - 3000mls per 100 kg cement  
(0.50% - 3.00% by weight of cement)

The correct dosage for the material package used should be determined by laboratory trials, please contact the OSCRETE Technical department for further advice.

### Standards

**Sigma 412** complies with the requirements of BS EN 934-2 and is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.



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### Compatibility

**Sigma 412** is compatible with all types of EN 197 cement systems.

**Sigma 412** should not be pre-mixed with other admixtures and should be batched separately.

### Storage

**Sigma 412** should be stored undercover and protected from extreme temperatures, if stored unopened within the range 5°C and 30°C the product will have a minimum shelf life of 12 months.

### Handling

Please refer to the **Sigma 412** Material Safety Data Sheet but in line with normal handling procedures, personal protective equipment should be worn.

### Packaging

200 litre drums, 1000 litre IBCs and bulk deliveries.

### Notes

**Sigma 412** should be added neat, immediately after 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 **Sigma 412** will not recover, avoid freezing at all cost, store above 10°C.

Please consult the OSCRETE Technical Department for advice on admixture selection.

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