



constructive solutions

# Structuro 530\*

High performance hyperplasticiser, based on polycarboxylate technology

## Uses

Structuro 530 is a high performance hyperplasticiser intended for applications where increased early and ultimate compressive strengths are required, and it has been developed for use in:

- Self compacting concrete
- Pumped concrete
- Concrete requiring long workability retention
- High performance concrete
- Per-cast concrete

## Advantages

- Increased early and ultimate compressive strengths
- Increased flexural strength
- Improved adhesion to reinforcing and stressing steel
- Improved resistance to carbonation
- Lower permeability
- Increased resistance to aggressive atmospheric conditions
- Reduced shrinkage and creep
- Increased durability

## Description

Structuro 530 is differentiated from conventional superplasticisers in that it is based on a unique carboxylic ether polymer with long lateral chains. This greatly improves cement dispersion. At the start of the mixing process electrostatic dispersion occurs but the presence of the lateral chains, linked to the polymer backbone. Generate a steric hindrance which stabilizes the cement particle's capacity to separate and disperse. This mechanism considerably reduces the water demand in flowable concrete.

Structuro 530 combines the properties of water reduction and workability retention. It allows the production of high performance concrete and/or concrete with high workability.

Structuro 530 is a particularly strong hyperplasticiser allowing production of consistent concrete properties around the required dosage.

## Technical support

Fosroc provides a technical advisory service for on-site assistance and advice on mix design, admixture selection, evaluation trials and dispensing equipment.

## Properties

<b>Appearance</b>	: Light yellow coloured liquid
<b>PH</b>	: 6.5
<b>Specific gravity</b>	: 1.13 ± 0.02 @ 20°C
<b>Chloride content</b>	: < 0.1%
<b>Alkali content</b>	: Typically less than 1.5 gm Na <sub>2</sub> O equivalent/litre of admixture

## Dosage

The optimum dosage of Structuro 530 to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 0.2 to 3.0 litres/100 kg of cementitious material.

## Use at other dosages

Dosages outside the normal range quoted above can be used to meet particular mix requirements. Contact Fosroc for advice in these cases.

## Effects of overdosing

Overdosage may cause delay in the setting time.

## Instructions for use

### Compatibility

Structuro 530 should not be used in conjunction with any other admixture unless prior approval is obtained from your local Fosroc office.

Structuro 530 is suitable for use with all types of Portland cements and cement replacement materials such as PFA, GGBFS, SRC and microsilica.

### Mixing

When used at the mixing plant, Structuro 530 should be added in the mixing water. In some instances, e.g. addition to ready mix concrete on site, Structuro 530 can be added directly in the truck mixer and mixed at maximum speed for an extra 5 minutes. For self compacting concrete, a viscosity enhancer eg. Structuro 480\* is recommended at a dosage between 1.0 – 4.0 litre per cubic metre.

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## Dispensing

The correct quantity of Structuro 530 should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results. Contact the Fosroc for advice regarding suitable equipment and its installation

## Estimating

## Supply

Structuro 530 is available in 200 litre and 200 kg drums or in 20 litre and 20 kg containers. For larger users, storage tanks can be supplied.

## Storage

Structuro 530 has a minimum shelf life of 12 months provided the temperature is kept within the range of 2°C to 50° C Should the temperature of the product fall outside this range then contact Fosroc for advice.

## Precautions

### Health and safety

Structuro 530 does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn.

Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately - do not induce vomiting.

For further information consult the material safety data sheet available for this product.

### Fire

Structuro 530 is water based and non-flammable.

## Cleaning and disposal

Spillages of Structuro 530 should be absorbed onto sand, earth or vermiculite and transferred to suitable containers. Remnants should be hosed down with large quantities of water.

The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.

\* Denotes the trademark of Fosroc International Ltd.



### Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service.

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