



# Structuro 232P

## Superplasticiser/High range water reducer

Structuro 232P is a new generation superplasticiser designed for use in both high workability concrete and in concrete where the maximum water reduction is required. Structuro 232P is based on polycarboxylate polymer technology which, by combining the effects of Steric and Electrostatic repulsion, are more powerful than conventional superplasticisers.

### Uses

- To produce superworkable Self Compacting Concrete.
- To give extremely high water reductions enabling significant increases in strength at early age.
- Excellent cost in use for concrete produced by either the Readymix or Precast industry.

### Advantages

- In high workable concrete use of Structuro 232P allows quicker placing and compaction with reduced labour and energy costs.
- Improved blemish free surface finish requires less remedial work.
- Greatly reduced water/cement ratio provides reduced permeability, more durable concrete.
- Chloride and formaldehyde free.

### Standards compliance

Structuro 232P complies with EN 934-2 Tables 3.1 and 3.2 as a high range water reducing/superplasticising admixture.

### Characteristics

<b>Nature</b>	Opaque liquid
<b>Colour</b>	Colourless / Opaque light yellow
<b>Specific gravity</b>	1.10 kg/l at 20°C
<b>pH at 10%</b>	7.3
<b>Chloride content</b>	<0.1 %
<b>Na<sub>2</sub>O equivalent</b>	<2.5%
<b>Freezing point</b>	Sensitive to freezing

After freezing, the properties of Structuro 232P can be homogenised by thorough agitation of the completely thawed product.

## Technical support

Fosroc provides a technical advisory service for on-site assistance and advice on admixture selection, evaluation trials and dispensing equipment. Technical data and guidance can be provided for admixtures and products for use with fresh and hardened concrete.

### Typical dosage

The optimum dosage of Structuro 232P for specific requirements is best established by trial mixes.

A starting dosage should be within the range 0.5 to 1.5 litres/100 kg of cement. Dosages of up to 3.0 litres/100 kg of cement are recommended particularly for high range water reduction.

There is a possibility of increasing the setting time when using the maximum dose. This may be of importance at low working temperatures and/or where high levels of cement replacement materials are used.

For further advice contact the Fosroc Technical Department.

### Dispensing

The correct quantity of Structuro 232P should be measured by means of a suitable dispenser at the time of batching the concrete. The admixture is best added with the latter part of the mixing water.

Structuro 232P may also be added to the concrete in the drum of a readymix truck. Full mixing of the admixture and the concrete should be ensured by mixing in the truck drum at high speed for a period of at least 2 minutes.

### Compatibility

#### With cements

Structuro 232P is suitable for use with all types of Portland cement and cement replacement materials e.g. GGBS, PFA and microsilica.

#### With other admixtures

Structuro 232P is compatible with other admixtures in the Fosroc range. Admixtures should never be premixed prior to their addition to the concrete mix.

When used in conjunction with Structuro 480 the production of Self Compacting Concrete (SCC) exhibiting no bleed or segregation is possible.

Contact the Fosroc Technical Department for further advice on the effects of various admixtures.



## Typical performance properties

Values obtained for concrete with 350 kg/m<sup>3</sup> of CEM Type 2 Portland cement using natural aggregates.

Structuro 232P dose	0% (control)	0.6%	0.9%
W/C ratio	0.46	0.46	0.39
Water reduction	-	-	16.0%
Slump (mm) :-			
Initial	40	230	205
Compressive strength (N/mm <sup>2</sup> )			
7 days	28.0	30.0	50.0
28 days	36.0	38.0	58.0

### Packaging

Structuro 232P is available in bulk supply or 200 kg drums.

### Storage

Structuro 232P has a minimum shelf life of 12 months provided the temperature is within 2°C to 50°C.

Should the product become frozen, the properties of Structuro 232P can be homogenised by thorough agitation of the completely thawed product.

### Precautions

#### Health and safety

Structuro 232P should not be swallowed or allowed to come into contact with skin and eyes.

Wear suitable protective gloves and goggles.

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 for this product.

#### Fire

Structuro 232P is water based and non-flammable.

#### Cleaning and disposal

Spillages of Structuro 232P should be absorbed onto sand, earth or vermiculite and transferred to suitable containers for waste disposal. Remnants should be hosed down with large quantities of water.



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### Important note

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