

## WATER REDUCING / SUPERPLASTICIZING ADMIXTURE FOR GLASS FIBER REINFORCED CONCRETE

### PRODUCT

EPSILONE CMP 111 is a superplasticizer based on synthetic polymers that has a strong dispersing power over the fine particles of glass fiber reinforced concrete hence allowing higher mechanical properties and high early compressive strength.

EPSILONE CMP 111 does not delay the setting time of the GFRC and is capable to achieve higher water reduction. EPSILONE CMP 111 works even in GFRC with very low water/cementitious materials ratio containing supplementary cementitious materials, such as GGBFS, Fly Ash and silica fume.

### PROPERTIES

- Increases GFRC cohesion
- Increases compressive, tensile, and flexural strengths
- Increases durability
- Increases fire resistance
- Produces high early strengths and can significantly increase mould utilization
- Can be used to gain economies due to a possible cement reduction
- High water reducing
- High workability-ease of placing and compaction without segregation
- Good adhesion - ease of pumping. No bleeding
- Good workability - excellent surface appearance
- Reducing or eliminating the need for vibration
- Minimal bleed water - excellent concrete quality
- High elastic modulus - superior load bearing capacity
- Can be used with acrylic polymers
- Provides GFRC with self consolidating properties
- Enhances aesthetic for minimal repairs
- Provides excellent dispersion and intensity of colored GFRC
- Provides properties for sustainable GFRC
- Provides better adherence to vertical molds surfaces

### SCOPE OF USE

EPSILONE CMP 111 is recommended for all cement types in Sprayed & Premixed GFRC for the following applications:

- Architectural cladding

- Moulding and landscaping
- Roofing, walls and windows
- Building renovation
- Foundations and flooring
- Modular building
- Permanent formwork
- Rail cable channeling
- Acoustic barriers and screens
- Bridge and tunnel lining panels
- Water and drainage

### CHARACTERISTICS

Appearance	Liquid (Slightly Brown)
Specific gravity	1.01 ± 0.02
Chloride content	NIL- BS 5075/EN 934-2

### STANDARDS

EPSILONE CMP 111 complies with:  
ASTM C – 494 – Type F.  
BS 5075 Part 1, BS EN 934, Part 2.  
ASTM C1017 Type I

### INSTRUCTION FOR USE

EPSILONE CMP 111 is totally miscible in water. No extension to the batching time is necessary. Do not add to dry cement.

For high early strength of GFRC, use a lower W/C and higher EPSILONE CMP 111 dosage.

### DOSAGE RATES

Trials should be conducted to determine the optimum dosage of EPSILONE CMP 111 for a particular mixture. A dosage of 500 to 2750 ml per 100 kg of cementitious materials is recommended. This may be changed to higher dosage in high ambient and mixture temperature conditions.

### EFFECT OF OVERDOSE

EPSILONE CMP 111 can be used at high dosage rates without any retardation. A severe over dosage of EPSILONE CMP 111 will result in the following:

- Very slight delay of the initial and final setting times of the concrete mixture.



# EPSILONE CMP 111

- Very Slight increase in air entrainment.
  - Increase in workability.
- No more severe side effects are known with the history of EPSILONE CMP 111.

## COMPATIBILITY

EPSILONE CMP 111 can be used in all types of Portland and sulfate-resisting cements, including those containing supplementary cementitious materials. For use with other cements, contact the company's technical service department. EPSILONE CMP 111 should be dispensed directly into the mixer and should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing EPSILONE CMP 111 they must be dispensed separately.

EPSILONE CMP 111 is not compatible with naphthalene sulfonate- and melamine sulfonate-based superplasticizers.

Consult the company's technical dept. for further advice.

## PACKAGING

EPSILONE CMP 111 is supplied in:

Bulk, barrels

Storage tanks can be provided for bulk use.

## STORAGE

EPSILONE CMP 111 can be stored up to 1 year from manufacturing date under cover, out of direct sunlight and protected from extreme temperatures.

In case of frost, the product recovers its properties after progressive thawing and homogenizing by agitation.

## HEALTH & SAFETY

In case of contact with skin or eyes, rinse thoroughly with water. If irritation persists, seek medical attention. If swallowed, do not induce vomiting and seek medical attention.

## QUALITY STATEMENT

All our products are manufactured to comply with our internal QA/QC program and quality management msystem to ensure consistency and quality

## DISCLAIMER

While the company guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control. It is recommended to verify with the company that the product is suitable for the intended use, and that this Data Sheet version is the latest one. The company may modify it without prior notice. Technical characteristics are listed for guidance only. For more information, please contact the company's office in your location.

## NOTE

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Edition: 06/10-A