

SPRAYCAST GRC

High Performance Multi-functional Admixture for GRC

Description

Spraycast GRC is a unique powdered polymer and plasticiser blend that has been designed to replace both the liquid polymer and liquid superplasticiser materials. Specifically developed for use in Sprayed GRC the formulation is based on new generation dispersing agents and carefully selected polymer blends its molecular structure has been designed to promote exceptional properties.

Comprising integrated powdered polymers, viscosity modifiers and superplasticising systems, **Spraycast GRC** offers the GRC producers enhanced strength gain, improved flexural strengths, faster demoulding and improved dry curing times.

Applications

Spraycast GRC is primarily used for making sprayed GRC products and will produce a free flowing non-segregating mix.

Benefits in GRC

- increased early age compressive strengths
- increased flexural strengths
- reduced shrinkage
- longer working life
- eliminates waste
- lower film form temperature
- health and safety benefits
- improved surface finish

Properties

Nature	Powder
Colour	White
Bulk Density	0.600 g/cm ³
pH	-
Chloride Content	<0.10%
Na ₂ O equivalent	<1.00%

Addition Rates

Dosage rate will be dependent on the mix design, the production process, the types of aggregates and the desired finish but is typically:

**300-600 grams per 25 kg cement.
(Typically 500g/25kg cement)**

Standards

Spraycast GRC is produced in accordance with the ISO 9001 Quality Management Standard and the ISO 14001 Environmental Management Standard.



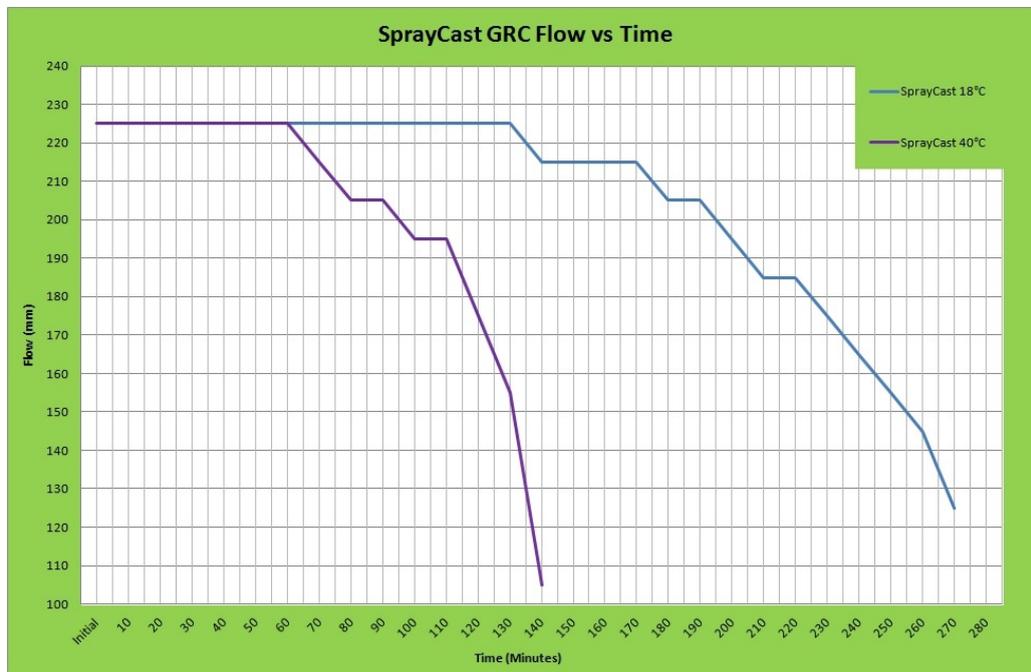
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Technical

The large area under the load-deflection curve indicates greater resilience, ductility (crack control) and impact resistance of the GRC material made with the Spraycast admixture. The more mature matrix at 28 days age provides greater efficiency of fibre reinforcement leading to higher post-cracking flexural strengthening. The glass fibre reinforcement imparts considerable ductility (crack control) and flexural strengthening to the brittle matrix composite, making it suitable for many applications in buildings. Producers have more latitude to modify concrete mix design, save costs and be more innovative with design possibilities when using a Spraycast modified GRC. Greater ductility means the potential for lighter, stronger components which are easier to handle and are less prone to damage in transit and during installation on-site.

The redispersible powder provides improved accuracy of dosing, reduced wastage and better inventory control together with a generally cleaner, safer working environment by virtue of the reduction in occurrence of liquid spills and consequent slip hazards.



FM 09569

EMS 73529



OSCRETE
CONSTRUCTION PRODUCTS



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Compatibility

Spraycast GRC is compatible with all types of EN 197 cement systems and offers a wide range of benefits particularly in the production of free flowing concrete/grout.

Storage

Spraycast GRC should be stored undercover, protected from extreme temperatures and stored unopened within the range 5°C and 30°C. Moisture ingress will cause the product to harden.

Handling

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

Packaging

Spraycast GRC is available as a loose powdered additive in sealed 15 kg plastic containers.

Batching order and mixing procedure

- 1/ Mix cement and water together to produce high viscosity slurry
- 2/ Add Spraycast and mix to produce low viscosity slurry
- 3/ Add sand whilst mixing
- 4/ Adjust water content (within specification) if necessary to required consistence

These procedures are a guide and other methods may be employed, however, the admixture **MUST** be added to **WETTED** cement and **NOT** added to the sand, this will negate the effects of the admixture and the plastic and hardened properties will not be achieved.

Call the **OSCRETE** Technical Department for further information.

A version of the **Spraycast** material is also "available in a **ME grade**" which has been modified, through the addition of special hydration controlling powdered additives, for use in spray applications in hot climates.

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Disclaimer

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