

Donplast® RGP

Recycled Glass Pozzolan



DESCRIPTION

Donplast RGP is a fine, white colored, amorphous, glass powder made from 100% recycled glass with excellent pozzolanic properties and a similar water demand to ordinary Portland cement.

Unlike silica fume, coal fly ash, ground granulated blast furnace slag, and other by-products, Donplast RGP is free of iron, manganese, and other undesirable color-inducing impurities, making it ideally suited for all applications using white cement and in decorative and pigmented concrete.

Donplast RGP Pozzolans will react with calcium hydroxide produced during the hydration of Portland cement to form additional cementitious compounds such as calcium silicate and alumina-silicate hydrates.

APPLICATIONS

- › Ready Mix Concrete (architectural, design and white cement).
- › Pre-cast.
- › High performance concrete (HPC).
- › Ultra high-performance concrete (UHPC).
- › Piles and structural concrete elements.
- › Decorative concrete requiring white siliceous materials.
- › The low iron content makes it particularly well suited for applications using white cement, such as mortars, stuccos, terrazzo, artificial stone, and cast-in-place or precast concrete products.

ADVANTAGES

- › Excellent late strength gain and high cement substitution rates.
- › Lower water demand.
- › Significant reduction in Greenhouse Warming Potential (GWP).
- › Improved concrete durability with lower permeability and enhanced chloride resistance.
- › Preferred lighter color, sometimes approaching white
- › Effective mitigation of Alkali.
- › Reduces bleeding and segregation by improving the concrete workability and cohesiveness.
- › Greatly improved freeze/thaw and scaling resistance.
- › Improves concrete pumpability.

STANDARDS

Donplast RGP complies with ASTM C1866/CSA A3000-21.

TECHNICAL PROPERTIES:

Analysis	Typical	Min.	Max.
Silica, SiO ₂ (%)	70.0	68.0	80.0
Iron Oxide, Fe ₂ O ₃ (%)	0.5	0.1	1.0
Alumina, Al ₂ O ₃ (%)	1.0	0.3	5.0
Calcia, CaO (%)	10.0	2.0	15.0
NaEq (%)	13.0	7.0	15.0
LOI	0.2	0.0	0.5
Pozzolan Activity (%) 28d	107.0	100.0	125.0
Water Demand (%)	99.0	97.0	102.0
Brightness (L*)	94.0	90.0	97.0
> 45 (%)	0.0	0.0	0.0

**These values describe a mean range and do not represent a specification.*

COMPATIBILITY

Donplast RGP can be used with all types of Portland cement and cement replacement materials.

PACKAGING

Available in 50 lb (22.7 kg) bags, and bulk supply. Other packaging options are available on request.

STORAGE

Donplast RGP has a shelf life of 12 months from date of manufacture if stored in dry area at temperatures over 36°F (2°C).

If these conditions are exceeded, contact DCP Technical Department for advice.

Don Construction Products Inc.

Lancaster, SC 2970, USA

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www.dcp-int.com



Donplast® RGP

CAUTIONS

HEALTH AND SAFETY

Donplast RGP is non-toxic. Avoid Creating airborne dust. Avoid skin and eye contact. Rubber gloves and eye protection should be worn all the times.

For further information, refer to the Material Safety Data Sheet.

FIRE

Donplast RGP is nonflammable.

WARRANTY

Unless expressly stated otherwise in the Sales Documents, the Limited Warranty shall expire on the expiry date listed on the Product's label or packaging. The full text of DCP's limited warranty is found in DCP's standard terms and conditions of sale (the "Terms"), which are available at [DCP Website/USA – Terms & Conditions](#). DCP's limited warranty is in all cases subject to, and conditioned upon, the Terms.

MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

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Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.

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DCP Building Excellence