

Donplast[®] RC500M

Powder admixture for the treatment of returned concrete



DESCRIPTION

Donplast RC500M is a one component, powder admixture specifically designed to treat returned fresh concrete. It is supplied in water-soluble bags that can be added directly into the drum of ready-mixed concrete truck.

Once Donplast RC500M is added to the concrete, it significantly minimizes cement hydration while rapidly stiffening the concrete. This effect converts concrete from a plastic form to a granular form, allowing it to be re-used.

Donplast RC500M enables concrete producers to provide a solution for returned concrete that does not require onsite crushing or disposal into landfills.

APPLICATIONS

Donplast RC500M is suitable for use with all types of returned concrete, and allows returned concrete to be re-used either as a base/sub-base material, or as backfill, or to partially replace aggregates in concrete.

ADVANTAGES

- » Single component.
- » Supplied in water-soluble bags for ease of handling.
- » Does not require additional equipment.
- » Low dosage for ease of use.
- » Quick action, provides rapid stiffening within 2 - 5 minutes.
- » Resultant granular material can be used to replace approximately 5 - 15% of aggregates in a mix.
- » Fixed dosage for treatment of a variety of concrete mixtures.

METHOD OF USE

- i. Determine the volume of concrete to be treated. Round the volume up to the next cubic yard (cubic meter).
- ii. Donplast RC500M is supplied in 2.0 lb. (0.9 kg) water-soluble bags, each bag is designed to treat 1 cubic yard (0.75 cubic meter) of returned concrete.
- iii. Reverse the drum of the concrete mixer to collect the returned concrete in the rear of the drum, so that when Donplast RC500M bag is dropped in the mixer, it activates immediately.
- iv. Place the needed amount of Donplast RC500M bags into the concrete in the mixer drum. Rotate the drum at full mixing speed for 2 to 3 minutes after adding Donplast RC500M admixture. Once the concrete turns to granulated form, stop the mixing.

TECHNICAL PROPERTIES:

Physical state:	Powder
Color:	White
Bulk density:	0.7 - 1.0 kg/m ³

- v. Discharge the treated concrete onto the ground by placing it back and forth to avoid discharging into one large pile. Use a discharge speed of 8 - 10 rpm. The recommended height of treated concrete should be less than 12 inches (300 mm).
- vi. For optimum results, flatten/ back drag the treated pile within 2 - 4 hours. Alternatively, the back dragging can be done at the end of the day before the loader is parked.
- vii. The following day (24 hr. from step #6), use a front-end loader to mix and turn the treated concrete piles. Make sure the piles are thoroughly turned to break-up any lumps of material.
- viii. The treated material can then be stored in piles, and used either as backfill or road-base material. Also, the treated material can be used as partial replacement for aggregates in concrete, given that additional testing and qualification has been done, and depending on local material specifications.

REMARKS

- » There are no compatibility issues associated with the use of Donplast RC500M to treat ready mix concrete containing chemical admixtures.
- » Concrete slump, air content, and compressive strength have been demonstrated to be unaffected when replacing coarse aggregates (5 - 15%) with concrete treated with Donplast RC500M.
- » The material treated with Donplast RC500M admixture should be certified before use in a concrete mixture since performance depends on local components. Prior to usage, it is crucial to study and abide by any municipal, state, or provincial standards. Contact your local sales representative for further details.
- » It is necessary not to remove Donplast RC500M from its water-soluble bags, since if it is activated by water outside concrete, the powder material will activate and become sticky, which will affect the handling and performance of the product.



Donplast® RC500M

PACKAGING

Donplast RC500M is available in 2.0 lb. (0.9 kg) water-soluble bags placed in pails. Each pail contains fifteen 2.0 lb. (0.9 kg) bags, and each pallet holds 36 pails.

STORAGE

Donplast RC500M should be stored in its original pails or other air-tight containers, in a clean and dry area at temperatures between 40°F to 105°F (4°C to 41°C).

SHELF LIFE

Donplast RC500M has a minimum shelf life of 18 months from date of manufacture when stored under the recommended conditions.

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

CAUTIONS

HEALTH AND SAFETY

Donplast RC500M should not come into contact with skin and eyes. Wear protective gloves/protective clothing/eye protection/face protection.

In case of contact with skin, wash thoroughly using soap and water. In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

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

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.

Don Construction Products Inc.

Lancaster, SC 2970, USA

info.usa@dcp-int.com

www.dcp-int.com

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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