Application Guidelines

Ref. #: DCP15/01-0585-A-2026

Donplast RC500M

(Powder admixture for the treatment of returned concrete)

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Section A: General Comments

General Notes:

The information below is a detailed overview of the application of DCP's **Donplast RC500M** powder admixture and should be read in conjunction with the relevant technical data sheet prior to application. All DCP Products should be applied by experienced specialist contractors.

All the points below assume correct preparation of the relevant surface.

Tools and Equipment:

It is suggested that the following list of equipment are adopted as a minimum requirement

Personal protection	:	*Protective overalls*
	:	*Goggles or a face mask*
	:	*Good quality gloves*
	:	*Safety shoes*
	:	*Safety helmet*

Product Information:

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 a 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.

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).

Section B: Application

1.0 Method of Use

1.1 Determine the volume of concrete to be treated.

1.2 Round the volume up to the next cubic yard (cubic meter).

1.3 **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 meter) of returned concrete.

1.4 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.

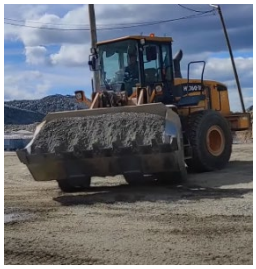
1.5 Place the needed amount of **Donplast RC500M** bags into the concrete in the mixer drum. Rotate the drum at full mixing speed for 2 to 3 minutes after adding **Donplast RC500M** admixture. Once the concrete turns to granulated form, stop the mixing.

1.6 Discharge the treated concrete onto the ground by placing it back and forth to avoid discharging into one large pile.

1.7 Use a discharge speed of 8 - 10 rpm.

1.8 The recommended height of treated concrete should be less than 12 inches (300 mm).

1.9 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.



1.10 The following day (24 hr. from step #1.9), use a front-end loader to mix and turn the treated concrete piles.

1.11 Make sure the piles are thoroughly turned to break-up any lumps of material.

1.12 The treated material can then be stored in piles, and used either as backfill or road-base material.

1.13 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

2.0 Cleaning

2.1 In some cases, where **Donplast RC500M** is overdosed or overmixed, a sticky gel-like material might form on the blades and drum of the mixer. It is recommended to clean this gel material after disposing the returned concrete and before the addition of new fresh concrete to the mixer.

2.2 To clean this, the following steps shall be followed:

- Discharge the treated concrete from the mixer.
- Add dry sand to the mixer and mix at high speed for 5 minutes. Every cubic yard of treated concrete will need 399 – 450 lb. (181 – 204 kg) of dry sand. Noting that this procedure is only needed in the case of gel formation in the truck which happens due to overdosing or overmixing of **DonPlast RC500M.**
- Discharge the sand from the mixer.

2.3 After this procedure, the concrete mixer will be cleaned from any gel residue, and is ready for the next concrete delivery.

3.0 Limitations

3.1 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.

Section C: Cautions

Health and safety

Donplast RC500M should not come into contact with skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advice if necessary. Apply in well-ventilated areas.

Fire:

Donplast RC500M is flammable.

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

Section D: Approval and Variations

This method statement is offered by DCP as a 'standard proposal' for the application of **Donplast RC500M**. It remains the responsibility of the Engineer to determine the correct method for any given application. Where alternative methods are to be used, these must be submitted to DCP for approval, in writing, prior to commencement of any work. DCP will not accept responsibility or liability for variations to the above method statement under any other condition.