

Recover[®]

Hydration Stabilizer ASTM C 494, Type D

Description

Recover[®] is a ready-to-use aqueous solution of chemical compounds specifically designed to stabilize the hydration of portland cement concretes. The ingredients are factory pre-mixed in exact proportions under strict quality control to provide uniform results. One Liter weighs approximately 1.15 kg (one gal weighs approximately 9.6 lbs).



Recover is approved by ASTM C 494 as a Type D retarder, and favorably evaluated by ICBO (International Conference of Building Officials, Report # 4886) as a hydration stabilizer.

Uses

Recover is used to stabilize mixer wash water and returned or leftover concrete for extended periods, allowing for reuse of the materials when required. It is also used where controlled set of concrete is needed.



Wash Water

For wash water applications, Recover is used to eliminate the need to discharge wash water from the mixer. This allows the wash water to be used as mix water in the next batch of concrete produced, and prevents the residual plastic concrete from hardening. Stabilization of up to 96 hours is possible depending on dosage rate.

Returned Concrete

For returned or leftover concrete, Recover is used to prevent plastic concrete from reaching initial set. This allows the concrete to be stored in a plastic state and then reused when required. Reuse may require the addition of freshly batched concrete and/or an accelerator such as Daracel[®] or PolarSet[®]. Stabilization of concrete for up to 96 hours is possible depending on dosage rate. Use prevents the waste of unused concrete.

Set Time Control

Recover is also used in situations where a controlled set time extension is required. Examples include: extended hauls, large continuous pours or pre-batching of concrete for later use.

How Recover Works

Recover stabilizes the hydration process of portland cement preventing it from reaching initial set. This stabilization is not permanent and is controlled by dosage rate. For wash water, the Recover treated water is mixed or sprayed in a specific manner to thoroughly coat the interior of the mixer. The water is used as mix water in the next batch of concrete produced, which then scours the unhardened material from the interior of the mixer. Stabilization of returned or leftover concrete with Recover maintains the plasticity of the concrete for the desired storage duration. This stabilized concrete then resumes normal hydration when the Recover dosage effects subside, or when it is activated by the addition of fresh concrete and/or an accelerator. The result is concrete with normal plastic and hardened properties.

Compatibility

Recover is compatible in wash water and concrete with all ASTM C 494 approved admixtures and ASTM C 260 approved air entraining admixtures. It is necessary to make a preliminary evaluation of the desired properties and to make product adjustments accordingly.

Addition Rates

Addition rates of Recover for wash water range from 180 to 3800 mL (6 to 128 fl oz) per treatment. The amount used will depend on the specific materials involved, mixer type, and stabilization period. Addition rates for returned or leftover concrete will range from 195 to 8350 mL/100 kg (3 to 128 fl oz/100 lbs) of cement. The amount used will depend on the specific materials involved, concrete age, temperature conditions, and stabilization period. For set time extension, applications, dosages range from 130 to 3260 mL/100 kg (2 to 50 oz/100 lbs) of cement. Proper dosage rate selection can only be achieved through pretesting. Consult your local Grace admixture representative.

Dispensing Equipment

A complete line of Grace dispensing equipment is available for Recover. This includes the Reach 360™ System which uses an innovative spray wand technology to simplify wash water procedures.

Packaging

Recover is available in bulk, delivered by metered tank trucks and 208 L (55 gal) drums. It contains no flammable ingredients. Recover will freeze, but will return to full effectiveness after thawing and thorough mechanical agitation.

U.S. Patent Nos. 4964917; 5203919; 5427617 and corresponding patents outside of the United States.

 Visit our web site at: www.gcp-grace.com

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W.R. Grace & Co.-Conn. 62 Whittemore Avenue Cambridge, MA 02140

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