

MasterPolyheed® 843

Mid-Range Water-Reducing Admixture

Polyheed® 843*

Description

All concrete where extended setting characteristics, and superior workability, and finishability qualities are desired, particularly in hot weather. MasterPolyheed 843 can be used for architectural or colored concrete.

MasterPolyheed 843 admixture meets ASTM C 494 for retarding Type B admixtures, Type A for water-reducing admixture and Type D for water reducing and retarding admixtures.

Applications

- Any concrete where extended setting characteristics, and superior workability, and finishability qualities are desired, particularly in hot weather.
- MasterPolyheed 843 can be used for architectural or colored concrete.

Description

- A mid range water reducer (5 a 15%) and excellent performance through a wide range of mid-range slump, particularly in 6 to 8 in (150 a 200 mm) slump in concrete placement.
- Extended setting time throughout the recommended dosage.
- Improved workability, pumpability and finishability, even in concrete mixes containing reduced amount of cementitious materials and/or concrete mixes containing fly ashes.
- Development of comparable compressive strength to that of the water-reducing and retarding admixtures
- Better performance with wide range types of cements, fly ashes, slag and aggregates

Benefits

- Superior workability and pumpability in warm weather applications
- Reduced bleeding and slump
- Improves finishability in flat, formed or extruded surfaces.
- Consistent performance in concrete mixes with low, mid-range of 6 to 8 in (150 to 200 mm) and high concrete slumps.

Performance Characteristics

Mixture data: 716 lb (325 kg) of cement Type I by ft³ . Slump of 6.4 in (165.0 mm), non-airentrained concrete. Concrete temperature 86 °F (30 °C), ambient temperature 90 °F (32 °C).

Technical Data

Setting Time.

	Initial Settings (h:min)	Difference (h:min)
Concrete Mix	3:40	----
MasterPolyheed 843 @		
› 400 mL/100 kg	4:32	+0:52
› 500 mL/100 kg	5:15	+1:35
› 600 mL/100 kg	5:55	+2:15

Compressive Strength

Concrete mix	7 days	28 days
	MPa (psi)	MPa (psi)
Normal	18.5 (100)	20.9 (100)
MasterPolyheed 843 @		
> 400 mL/100 kg	25.2 (136)	30.5 (146)
> 500 mL/100 kg	23.4 (126)	26.4 (126)
> 600 mL/100 kg	21.4 (116)	30.1 (144)

Note: The data shown are based upon controlled laboratory tests. Reasonable variations from the results shown here may be experienced as a result of differences in concrete making materials and jobsite conditions.

Guidelines for use

Dosage: MasterPolyheed 843 is applied at a range of 12 to 30 fl oz/100 lb of cementitious material (350 to 900 mL per 100 kg of cementitious material) for most concrete mixtures. BASF does not recommend the use of dosages outside the recommended range without trial testing. Consult your BASF sales representative for assistance in determining the dosage for optimum performance.

Product Notes

Corrosivity – Non-Chloride, Non-Corrosive: MasterPolyheed 843 admixture will neither initiate nor promote corrosion of reinforcing or prestressing steel embedded in concrete, or of galvanized steel floor and roof systems. Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of MasterPolyheed 843 admixture.

Compatibility: MasterPolyheed 843 admixture is compatible with most admixtures and can be used in combination with other BASF admixtures, unless stated otherwise. When used in conjunction with other admixtures, each admixture must be dispensed separately into the concrete mixture. MasterPolyheed 843 admixture can be used with air entrainer admixtures if it meets ASTM, AASHTO and CRD requirements.

Storage and Handling

Storage Temperature: MasterPolyheed 843 admixture should be stored at a temperature above 32 °F (0 °C). If MasterPolyheed 843 admixture freezes, thaw at 35 °F (2 °C) or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation.

Shelf Life: MasterPolyheed 843 admixture has a minimum shelf life

of 12 months. Depending on storage conditions, the shelf life may be greater than stated. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterPolyheed 843 admixture has been exceeded.

Packaging

MasterPolyheed 843 is supplied in 55 gal (208 L) drums, 275 gal (1,040 L) totes, and by bulk delivery.

Related Documents

Safety Data Sheet (SDS): MasterPolyheed 843

Additional Information

For additional information on MasterPolyheed 843 admixture or its use in developing concrete mixtures with special performance characteristics, contact your local sales representative.

The Admixture Systems business of BASF's Construction Chemicals division is the leading provider of solutions that improve placement, pumping, finishing, appearance and performance characteristics of specialty concrete used in the ready-mixed, precast, manufactured concrete products, underground construction and paving markets. For over 100 years we have offered reliable products and innovative technologies, and through the Master Builders Solutions brand, we are connected globally with experts from many fields to provide sustainable solutions for the construction industry.

Limited Warranty Notice

BBASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of BASF. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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*Polyheed® 843 became MasterPolyheed® 843 under the Master Builders Solutions brand effective January 1, 2014.

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BASF Corporation
Construction Chemicals

Costa Rica
Tel: 506-2440-9110
www.master-builders-solutions.centroamerica.basf.com

Panamá
Tel: 507 301 0970

Puerto Rico
Tel: 1-787-258-2737
www.master-builders-solutions.caribbean.basf.com