

MasterPolyheed[®] 980

Mid-Range Water-Reducing Admixture

Description

MasterPolyheed 980 ready-to-use water-reducing admixture is very effective in producing concrete with enhanced finishing characteristics and with different levels of workability. MasterPolyheed 980 admixture meets ASTM C 494/C 494M requirements for Type A water-reducing, and Type F, high-range water-reducing, admixtures.

Applications

Recommended for use in: All concrete applications where superior finishability, workability, and pumpability qualities are desired, in particular, flatwork, pumped concrete, pervious concrete, and harsh concrete mixtures.

Features

- True mid-range water reduction (5-15%) and excellent performance across a wide slump range, especially the difficult slump range of 5 to 8 in. (125 to 200 mm)
- Superior finishability, workability, and pumpability qualities even in concrete mixtures containing low amounts of cementitious materials
- Superior finishing characteristics for residential/commercial flatwork and formed surfaces

Benefits

- Significantly reduced placement and finishing time resulting in lower in-place concrete costs
- Higher strength at all ages
- Enhanced concrete durability
- Increased service life of concrete structures

Performance Characteristics

Mixture Data: 517 lb/yd³ (307 kg/m³) of Type I cement; slump 6 to 7 in. (150 to 180 mm); 2 to 3% air; concrete temperature 70 °F (21 °C); ambient temperature 70 °F (21 °C).

Setting Time

Mixture	Initial Set (h:min)	Difference over Reference (h:min)
Reference	4:02	
MasterPolyheed 980 admixture @ 5 fl oz/cwt (325 mL/100 kg)	4:38	+0:36
10 fl oz/cwt (650 mL/100 kg)	5:28	+1:26

Compressive Strength, psi (MPa)

Mixture	7-Day	28-Day
Reference	4650 (32.1)	5610 (38.7)
MasterPolyheed 980 admixture @ 5 fl oz/cwt (325 mL/100 kg)	5330 (36.7)	6060 (41.8)
10 fl oz/cwt (650 mL/100 kg)	6280 (43.3)	7400 (51.0)



Guidelines for Use

Dosage: MasterPolyheed 980 admixture has a recommended dosage range of 2 to 12 fl oz/cwt (130 to 780 mL/100 kg) of cementitious materials for most concrete mixtures. As the dosage of MasterPolyheed 980 admixture increases to 12 fl oz/cwt (780 mL/100 kg) of cementitious materials, normal concrete setting characteristics are maintained, and early and ultimate compressive strengths increase. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. Consult your local sales representative for assistance in determining the dosage for optimum performance.

Product Notest

Corrosivity – Non-Chloride, Non-Corrosive:

MasterPolyheed 980 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 980 admixture.

Compatibility: MasterPolyheed 980 admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid- and high-range water reducers, accelerators, retarders, extended-set control admixtures, air entrainers, corrosion inhibitors, and shrinkage reducers. **Do not use MasterPolyheed 980 admixture with admixtures containing beta-naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced.**

Storage and Handling

Storage Temperature: MasterPolyheed 980 admixture should be stored between 35 and 105 °F (2 and 41 °C). If MasterPolyheed 980 admixture freezes, thaw at 40 °F (5 °C) or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation.

Shelf Life: MasterPolyheed 980 admixture has a minimum shelf life of 18 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 980 admixture has been exceeded.

Packaging

MasterPolyheed 980 admixture is supplied in 3 gal (11 L) pails, 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

Related Documents

Safety Data Sheets: MasterPolyheed 980 admixture

Additional Information

For additional information on MasterPolyheed 980 admixture or its use in developing concrete mixtures with special performance characteristics, contact your local sales representative.

Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.

Limited Warranty Notice

Master Builders Solutions Admixtures US, LLC ("Master Builders Solutions") 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. MASTER BUILDERS SOLUTIONS 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 Master Builders Solutions. 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. MASTER BUILDERS SOLUTIONS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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