

03 30 00	Cast-in-Place Concrete
03 40 00	Precast Concrete
03 70 00	Mass Concrete

MasterPozzolith[®] 322

Water-Reducing Admixture

Description

MasterPozzolith 322 ready-to-use, liquid admixture is used for making more uniform and predictable quality concrete. It meets ASTM C 494/C 494M requirements for Type A, water-reducing, Type B, retarding, and Type D, retarding and water-reducing admixtures.

Applications

Recommended for use in:

- Prestressed concrete
- Precast concrete
- Reinforced concrete
- Shotcrete
- Lightweight concrete
- Pumped concrete
- 4x4™ Concrete
- Pervious concrete
- Self-consolidating concrete (SCC)

Features

- Reduced water content required for a given workability
- Normal setting characteristics in a concrete mixture

Benefits

- Improved workability
- Reduced segregation
- Superior finishing characteristics for flatwork and cast surfaces
- Increased compressive and flexural strengths

Performance Characteristics

Mix Data: 400 lb/yd³ (237 kg/m³) of Type I cement; slump 5 inches (125 mm); non-air-entrained concrete; concrete temperature 76 °F (24 °C); ambient temperature 74 °F (23 °C).

Setting Time

Mix Design (h:min)	Initial Set (h:min)	Difference
Plain Concrete	5:20	REF
MasterPozzolith 322 admixture @		
3 fl oz/cwt (195 mL/100 kg)	5:15	-0:05
5 fl oz/cwt (325 mL/100 kg)	5:40	+0:20
7 fl oz/cwt (460 mL/100 kg)	6:20	+1:00

Compressive Strength

Mix Design	7 Days			28 Days		
	psi	MPa	%	psi	MPa	%
Plain Concrete	2150	14.8	100	3070	21.2	100
MasterPozzolith 322 admixture @						
3 fl oz/cwt (195 mL/100 kg)	2820	19.4	131	3970	27.4	129
5 fl oz/cwt (325 mL/100 kg)	3160	21.8	147	4100	28.3	134
7 fl oz/cwt (460 mL/100 kg)	3190	22.0	148	4390	30.3	143

Note: The data shown are based on 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. MasterPozzolith 322 admixture can be utilized in non-air-entrained and air-entrained concrete mixtures.



Setting time of concrete is influenced by the chemical and physical composition of the basic ingredients of the concrete, the temperature of the concrete and the climactic conditions. Trial mixes should be made with job site materials to determine the dosage required for specified setting time and a given strength requirement.

Guidelines for Use

Dosage: MasterPozzolith 322 admixture is recommended for use within a range of 3-7 fl oz/cwt (195-460 mL/100 kg) of cementitious materials for most concrete mixtures using average concrete ingredients. Because of variations in concrete materials, jobsite conditions, and/or applications, dosages other than the recommended amounts may be required. In such cases, trial testing must be performed. Contact your local sales representative for assistance.

Product Notes

Corrosivity – Non-Chloride, Non-Corrosive: MasterPozzolith 322 admixture will neither initiate nor promote corrosion of reinforcing steel in concrete. This admixture does not contain intentionally added calcium chloride or other chloride-based ingredients.

Compatibility: MasterPozzolith 322 admixture may be used in combination with any Master Builders Solutions admixtures. When used in conjunction with other admixtures, each admixture must be dispensed separately into the mixture.

Storage and Handling

Storage Temperature: MasterPozzolith 322 admixture should be stored above freezing temperatures. If MasterPozzolith 322 admixture freezes, thaw at temperatures above 35 °F (2 °C) and completely reconstitute by mild mechanical agitation. **Do not use pressurized air for agitation.**

Shelf Life: MasterPozzolith 322 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 MasterPozzolith 322 admixture has been exceeded.

Packaging

MasterPozzolith 322 admixture is supplied in 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

Related Documents

Safety Data Sheets: MasterPozzolith 322 admixture

Additional Information

For additional information on MasterPozzolith 322 admixture, 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.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on Master Builders Solutions' present knowledge and experience. However, Master Builders Solutions assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third-party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. Master Builders Solutions reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.



© Master Builders Solutions ■ 09/23 ■ DAT-0052

® registered trademark of Master Builders Solutions in many countries of the world

www.master-builders-solutions.com/en-us

Master Builders Solutions Admixtures US, LLC

23700 Chagrin Boulevard
Beachwood, Ohio, 44122-5544
USA ■ 800-628-9990

Master Builders Solutions Canada, Inc.

1800 Clark Boulevard
Brampton, Ontario L6T 4M7
CANADA ■ 289-360-1300