

POZZOLITH® 344N

Concrete admixture

DESCRIPTION:

POZZOLITH® 344N ready-to-use, liquid admixture is for making more uniform and predictable quality concrete. It meets ASTM C 494 requirements for Type A water-reducing admixtures, specifically:

- Increased strength—compressive and flexural
- Relative durability to damage from freezing and thawing—well above industry standards
- Reduced water content required for a given workability
- Improved normal-setting characteristics

ADVANTAGES:

Concrete with POZZOLITH 344N admixture sets at a rate comparable to plain concrete while providing the following special qualities:

- Improved workability
- Reduced segregation
- Superior finishing characteristics for flatwork and cast surfaces
- Effective as a singular admixture or as a component in a Master Builders Admixture System

PERFORMANCE CHARACTERISTICS:

Mix Data:

439 lb (260 kg) of Type II cement per cubic yard (cubic meter) 3-3/4 - 4 inches (95 - 102 mm) slump
Concrete and ambient temperature 72 °F (22 °C)
Non-air-entrained concrete

Setting Time Performance¹

Mix	Initial Set		Final Set	
	Hour:Minute	Hour:Minute	Hour:Minute	Hour:Minute
Plain	5:50		7:50	
POZZOLITH 344N @				
3 fl oz (195 mL)	5:30		7:10	
5 fl oz (325 mL)	5:40		7:35	

Note: Dosage rate per 100 lb (100 kg) of cement.

Compressive Strength Performance¹

Mix	1 Day			7 Day			28 Day		
	psi	MPa	%	psi	MPa	%	psi	MPa	%
Plain	870	6.0	100	2510	17.3	100	3870	26.7	100
POZZOLITH 344N @									
3 fl oz (195 mL)	1270	8.8	146	3130	21.6	125	4640	32.0	120
5 fl oz (325 mL)	1400	9.7	161	3430	23.6	137	4850	33.4	125

NOTE: The data shown is 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.

WHERE TO USE:

POZZOLITH 344N admixture is recommended for use in concrete where normal-setting characteristics are desired.

As a result of the above advantages, this admixture improves pumped concrete, shotcrete (wet mix), and conventionally placed concretes. It improves plain, reinforced, precast, lightweight or standard weight concrete.

POZZOLITH 344N admixture can be used with portland cements approved under AASHTO, ASTM and CRD specifications. The use of POZZOLITH 344N and a Master Builders air-entraining admixture is recommended whenever concrete is required to withstand freeze/thaw cycles. When used in conjunction with another admixture, each admixture must be dispensed separately into the mix.

POZZOLITH 344N admixture can also be used in white or colored concrete and in architectural concrete .

NOTE: POZZOLITH 344N admixture contains intentionally added calcium chloride. The admixture, due to chlorides originating from all the ingredients used in its manufacture, contributes less than 0.009% chloride ions by weight of the cement when used at the rate of 1 fl oz per 100 lb (65 mL per 100 kg) of cement. This represents about 0.0045% by weight of cement of water-soluble chloride ions in the hardened concrete at a 28 day age (FHWA Test Procedure for Chloride in Concrete). The ACI Building Code Requirements for Reinforced Concrete (ACI 318-89) stipulate limits for water-soluble chloride ions in concrete for specific applications.

When applications limit the use of POZZOLITH 344N admixture. Master Builders can furnish special, non-chloride, normal-setting admixtures.

QUANTITY TO USE:

POZZOLITH 344N admixture is recommended for use at a rate of 3 to 9 fl oz per 100 lb (195 to 590 mL per 100 kg) of cement for most concrete mixes using average concrete ingredients. Because of variations in job conditions and concrete materials, dosage rates other than the recommended amounts may be required. In such cases, contact your local Master Builders representative.

PACKAGING:

POZZOLITH 344N admixture is supplied in 55 U.S. gallon (208 liter) drums and by bulk delivery.

TEMPERATURE PRECAUTION:

If POZZOLITH 344N admixture has frozen, thaw at 35 °F (2 °C) or above and completely reconstitute by mild mechanical agitation. **Do not use pressurized air for agitation.**

For additional information on POZZOLITH 344N admixture or on its use in developing a concrete mix with special performance characteristics, contact your local Master Builders representative.

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