

## Water reducing/plasticizing admixture



CE Approved – Certificate No. 0086-CPD-469071  
EN934 part 2 table 2

### Description of Product

POZZOLITH<sup>®</sup> 324N is a powerful plasticizer based on lignosulphonate which disperses and deflocculates the cement particles within a concrete mix. It can be used to improve workability, without the addition of extra water, or to allow reductions in the free water content of the concrete mix.

POZZOLITH<sup>®</sup> 324N complies with:

- EN 934 - 2 table 2
- ASTM C-494 Type A & D
- WRC Approved - for contact with Potable Water

### Fields of Application

- To increase/extend workability.
- To increase compressive strength.
- To effect cement economies.
- Wide dosage range enabling water reductions to produce a dense concrete with reduced permeability and reduced water penetration.

- In areas of congested reinforcement where high workability is of benefit.
- Wherever reduced water contents would be of benefit.
- In hot weather to extend workability.

### Features and Benefits

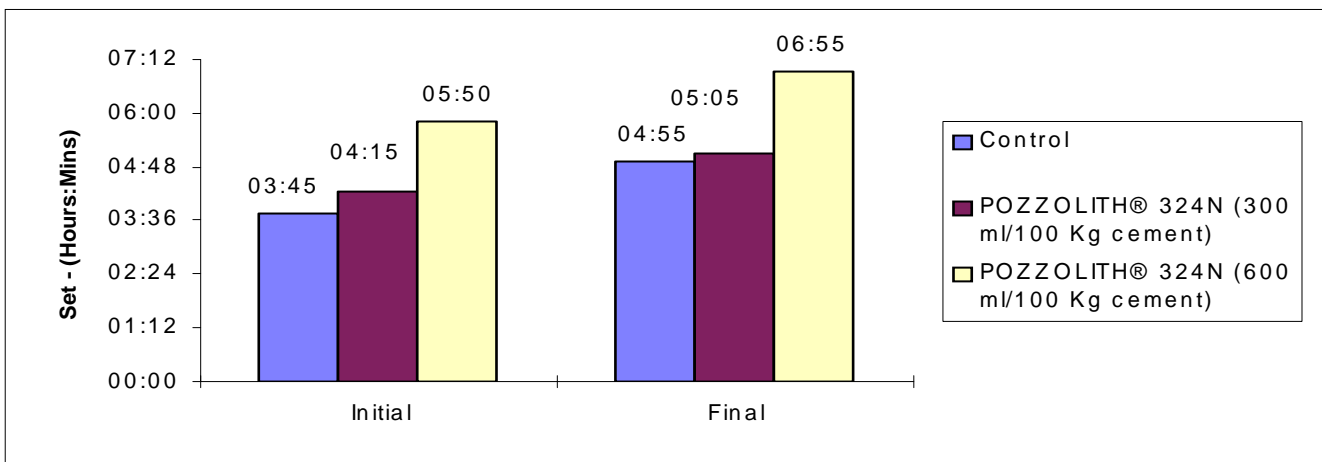
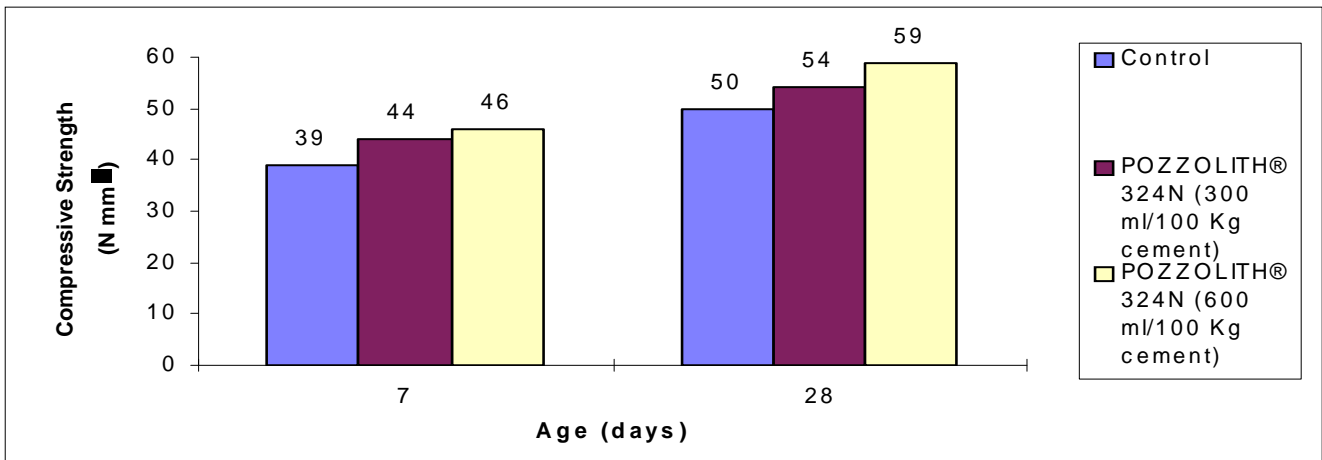
- Significantly improves the workability of a concrete therefore reducing placing time.
- Improves the cohesive properties of the concrete helping to reduce segregation and bleed.
- Allows water reduction to be achieved whilst maintaining workability, thereby increasing strength, durability and impermeability.
- Enables economies in mix designs to be achieved.
- Improves strengths in mixes containing PFA / GGBFS and micro silica blends.

### Technical Data/Typical Properties

Appearance	Brown liquid
Specific gravity @ 20°C	1.18 ± 0.03 g/cm <sup>3</sup>
pH-value	5.0 ± 1
Alkali content (%)	Less than or equal to 0.50
Chloride content (%)	Less than or equal to 0.10

### Typical Results

- Mixes contain 300 Kg per cubic metre of cement @ 55 mm slump.
- Water reduction of 8% @ 0.3% by weight of cement and 12% @ 0.6% by weight of cement.
- Strength increases over control are greater than the percentage water reductions.


**Table 1 - Performance results for POZZOLITH® 324N at 300 Kg m<sup>3</sup> mix design**

Mix	Dosage ml/100 Kg cement	Slump mm	w/r %	Air Content %	Compressive Strength N mm <sup>2</sup>				Setting Times hr:min	
					7 day	% inc	28 day	% inc	Initial	Final
Control	-	55	-	1.8	38.5	-	49.5	-	3:45	4:55
POZZOLITH® 324N	300	55	8.1	1.9	43.5	13.0	54.0	9.1	4:15	5:05
POZZOLITH® 324N	600	55	12.4	2.1	46.0	19.5	58.5	18.2	5:50	6:55

%inc - Strength gain (%) compared to control mix

**Application Procedure**

POZZOLITH® 324N should be added to the concrete mix during the mixing cycle at the same time as the water and the aggregates. Never add POZZOLITH® 324N to the dry cement.

**Dosage**

Field trials should be conducted to determine the optimum addition rates of POZZOLITH® 324N. As a starting point, the following dosage range is recommended.

*By Volume* - 0.127 to 0.424 litres per 100 kg of cement (binder).

*By Mass* - 0.15 to 0.50 kg per 100 kg of cement (binder).

Other dosages may be required depending on specific working conditions.

**Dispensing**

POZZOLITH® 324N should be dispensed through a proprietary dispenser. Details are available on request from our Technical Services Department.

**Compatibility**

POZZOLITH® 324N can be used with all types of Portland cement including Sulphate Resisting and PFA / GGBFS blends and micro silica. For use with other special cements, contact our Technical Services Department.

POZZOLITH® 324N should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing POZZOLITH® 324N they must be dispensed separately.

**Effects of over dosage**

A severe over dosage of POZZOLITH® 324N may result in the following: -

- Retardation of initial set.
- Increase in air entrainment.
- Increase in workability.

Providing concrete is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete.

**Shelf Life**

Minimum 12 months when stored in accordance with the Manufacturer's instructions.

**Packaging**

POZZOLITH® 324N is supplied in Bulk, 1000-litre IBC's, 205-litre drums and 25-litre containers.

**Storage**

POZZOLITH® 324N must be stored in a place where temperature does not drop below +5°C. If product has frozen, thaw at +3°C and agitate until completely reconstituted. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals, Technical Services Department.

**Watchpoints**

POZZOLITH® 324N is not a fire or health hazard. Spillages should be washed down immediately with cold water. For further information see Product Health and Safety Advice Sheet.

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POZZOLITH<sup>®</sup> 324N, BASF plc, Construction Chemicals, Version 11**Health and Safety**

\*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

**Spillage**

Chemical products can cause damage; clean spillage immediately.

**DISCLAIMER**

"BASF plc, Construction Chemicals" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.