

Air entraining admixtures



CE Approved – Certificate No. 0086-CPD-469071
EN934 part 2 table 5

Description of Product

Integral concrete plasticizer and water reducing agent based on lignosulphonate with moderate air entraining properties.

CRD-C87: Types A&D EN934 part 2 table 5

Meets the requirements of WRC for contact with potable water.

Fields of Application

- In areas of congested reinforcement where high workability is of benefit.
- In roads, runways, parking aprons to increase durability.
- In concrete brick and block manufacture.
- In mass pours to increase workability.
- For air entrained concrete
- To increase workability
- To reduce bleeding in concrete and improve cohesive properties.
- To increase durability and reduce permeability
- Improves resistance to freeze/thaw attack and the effects of de-icing salts.

Features and Benefits

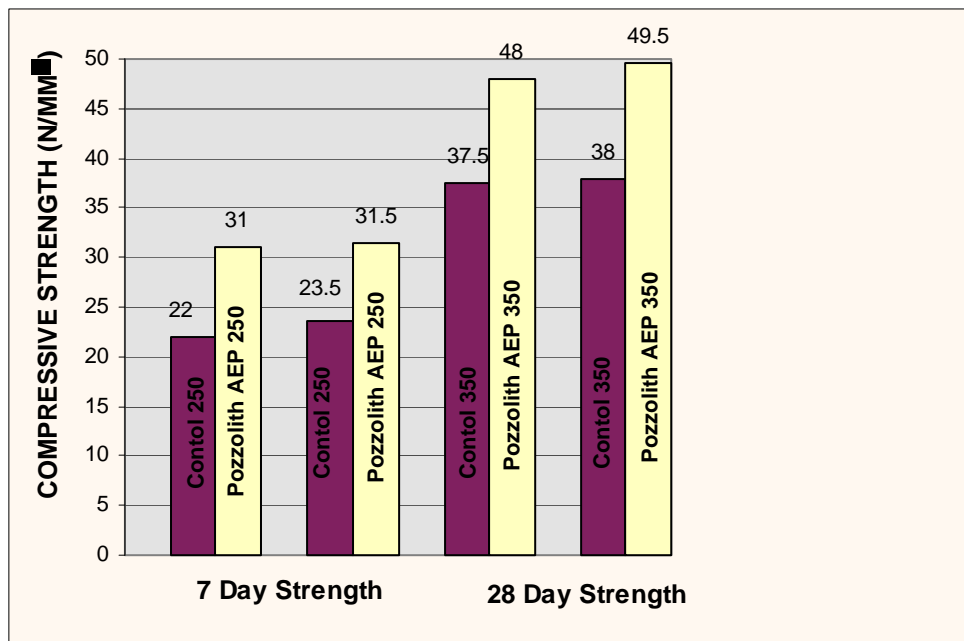
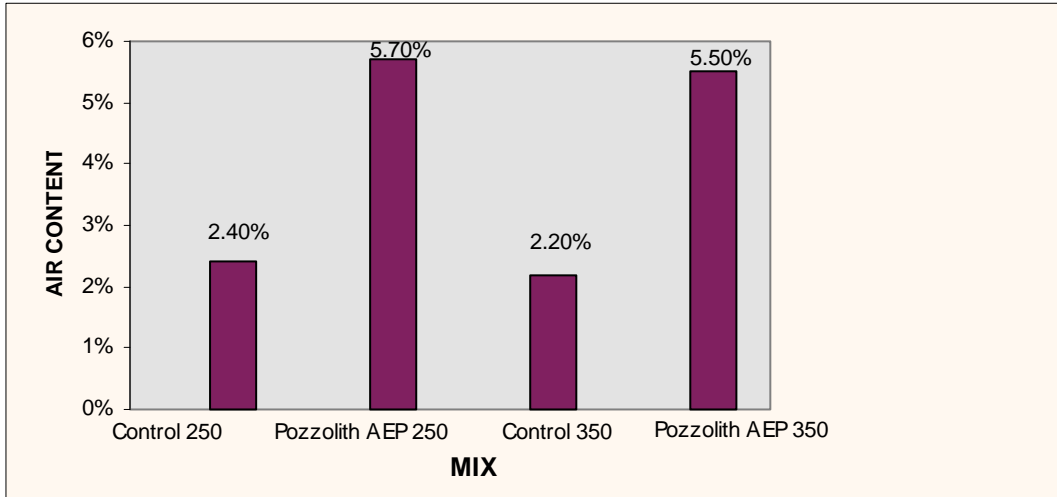
- POZZOLITH[®] AEP enables air entrainment of approximately 5% into a concrete mix of 50mm slump. Its plasticizing action will give an increase in workability thus facilitating a high water reduction in the water content of approximately 10-15%.
- These properties will allow air entrainment in the concrete without loss in strength, which normally would be associated with air entrainment subject to normal mix adjustments.
- Concrete will be less susceptible to bleeding and segregation, especially where being poured or pumped, and will have increased durability and reduced permeability.
- Of particular benefit in crushed aggregate mixes where the improved cohesion of the mix results in minimising sand runs and eliminating bleeding.
- Cohesion of the mix aids pouring and placing of concrete.
- The powerful air entraining agent in POZZOLITH[®] AEP enables it to entrain controlled amounts of air bubbles of optimum spacing and diameter into the concrete to give high durability under freeze-thaw conditions.

Technical Data/Typical Properties

Appearance	Brown liquid
Specific gravity @ 20°C	1.18 ± 0.03 g/cm ³
pH-value	5.0 ± 1
Alkali content (%)	Less than or equal to 4.00
Chloride content (%)	Less than or equal to 0.10

Typical Results

Control and POZZOLITH[®] AEP - 250 kgs and 350 kgs per m³. Portland Cement - 50 slump - 20mm aggregate



Mix	Slump	Air Content	7 Day Strength	28 Day Strength	W/C Ratio
Control 250	55	2.4%	22.0	31.0	0.68
POZZOLITH [®] AEP* 250	50	5.7%	23.5	31.5	0.56
Control 350	50	2.2%	37.5	48.0	0.48
POZZOLITH [®] AEP* 350	50	5.5%	38.0	49.5	0.40

*Admixture Dosage 0.28% by weight of cement

Application Procedure

POZZOLITH[®] AEP should be added to the concrete mix during the mixing cycle at the same time as the water or the aggregates. Never add POZZOLITH[®] AEP to the dry cement. No extension to normal mixing time is necessary.

Dosage

As with most admixtures, field trials should be conducted to determine the optimum addition rates of POZZOLITH[®] AEP. These trials will be helpful in assessing the correct dosage for desired conditions, such as high early strength and correct degree of air.

As a guide to these trials, the following dosage range is recommended as an initial starting point, although dosages may vary considerably depending on sands and aggregates used.

By Volume - 0.085 to 0.423 litres per 100 kg of cement (binder).

By Mass - 0.10 to 0.50 kg per 100 kg of cement (binder).

Dispensing

POZZOLITH[®] AEP should be dispensed through a proprietary dispenser. Details available on request.

Shelf Life

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

Packaging

POZZOLITH[®] AEP is supplied in 1000-litre IBC's, 205-litre drums and 25-litre containers.

Compatibility

POZZOLITH[®] AEP can be used with all types of Portland cement including Sulphate Resisting. For use with other special cements, contact your BASF Construction Chemicals office.

POZZOLITH[®] AEP should not be pre-mixed with other admixtures; if other admixtures are to be used they must be dispensed separately. Consult your local BASF Construction Chemicals Representative for advice.

Storage

POZZOLITH[®] AEP 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.

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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.