



# Cimpore AE 21

## Air entraining additive

**Cimpore AE 21** complies with the EN 934-2.

**Cimpore AE 21** is a non chlorinated air entraining additive, that can be used in mortar and concrete and that provides :

- a regular distribution of air microbubbles in the mass,
- a reduced coalescence of air bubbles at the time of transport and execution,
- a better uniformity of bubble diameter.

In green concrete, **Cimpore AE 21** has a plasticizer effect that enables a water reduction of about 5 %.

Its dosage range is particularly adapted to concrete manufacturing materials.

### CHARACTERISTIC VALUES

- Colourless liquid
- Density at 20°C :  
1.050 kg/dm<sup>3</sup> ± 0.020
- pH : 9.0 ± 1.0
- Dry matter : 9.1% ± 0.9%  
(halogen)
- Dry matter : 9.5% ± 1.0%  
(NF EN 480-8)
- Na<sub>2</sub>O<sub>equivalent</sub> : ≤ 1.8 %
- Cl - : ≤ 0.10 %
- Freezing temperature point :  
-1°C
- Viscosity :  
at 20° C ≈ 20 cP  
at 5° C ≈ 20 cP
- Corrosion effect : PND  
- contains components only taken from EN 934-1 : 2008 Annex A1.

### FIELD OF APPLICATION

**Cimpore AE 21** enables a regular distribution of air entraining so that it is the recommended product to enable mortar and concrete to resist against frost/melting cycle damages :

- Paving concrete,
- Concrete in mountaineous areas,
- Prefab elements in concrete.

## DIRECTIONS FOR USE

**Cimpore AE 21** is totally soluble in water. It is recommended to incorporate it into the gauging water.

## STANDARDIZATION TRIALS

Trials according to the EN 934-2 norm, carried out on a concrete containing 350 kg/m<sup>3</sup> of CEM I 42.5 CP2.

Dosage = 0.27%

Dosage	Water in L/m <sup>3</sup>	Air entrained in %	Résistances in MPa units	
			1 day	28 days
Control	178	1.8	17.5	38.5
Cimpore AE21 at 0.27%	162	5.5	16	35

## DOSAGE

From 0.05 to 1kg per 100 kg of cement. The product is commonly dosed at 0.25 % of the cement weight.

The air entraining effect depends on the nature of the other concrete components and environment.

A prior study is always useful to determine the exact dosage to use according to need.

## PRECAUTIONS FOR USE

In case of frost, **Cimpore AE 21** should be entirely thawed and re-homogenized before use.

Must be stored in a location protected against frost, sun and high temperatures.



*Does not resist against frost*

## SAFETY

In case of projection, rinse with water.

It is recommended to wear glasses and gloves when handling the product.

In all cases, refer to the material safety data sheets.

## PACKAGING

- Bulk
- Container of 1000 liters.
- Barrels of 200 liters.
- Kegs of 30 liters.

## SERVICE LIFE

- Expiration date : 1 year as of manufacturing date.

*The material technical and safety data sheets can be consulted on our internet site : <http://www.axim.fr>*