



Product information

Names[®] XC

Expansive additive for reduced shrinkage of cement-based products

Description

Names[®] XC is a highly efficient addition, made up from a special mineral mix and milled to the particle size of cement. Names[®] XC has been modified to reduce and compensate the thermal shrinkage of cement-based construction products.

Names[®] XC reacts with water with expanding volume developing a strong temperature increase.

Chemical composition (M.-%, approx.)

CaO	> 90
MgO	< 2

Physical properties (approx.)

Appearance	white, easy handling and flowing powder	
Specific density	3,4 g/cm ³	
Apparent density loose	~ 900 g/l	
Particle size	> 200 μ	< 1 %
	< 32 μ	> 90 %

Function

The mineral parts of Names[®] XC react with water producing new hydration products. Together with the hardening phase of the cement these will produce a volume increase (expansion). This structure contains a pre-stress that will counteract the tensioning stresses of concrete in its hardening phase. Concretes with Names[®] XC have to be kept humid for five days to get a good expansion. The maximal expansion happens in the first 48 hours.

Advantages

Depending on the addition level:

- reduced shrinkage
- increased impermeability to water
- increased mechanical strength

and ease of handling. Please note the danger signs.



Application

Names[®] XC may be used in a variety of applications, such as

- high density mortars and concrete
- industrial flooring
- repair mortars
- self-levelling compounds
- anchor mortars

To give the required expansion, it is necessary to assure enough availability of water and the use of curing compounds.

Addition level

Typical addition levels are 2 – 4 % on the cement weight. Expansion and reduced shrinkage are proportional to the addition level. It is highly recommended that laboratory trials should first be carried out to determine the correct addition level of Names[®] XC.

A too high addition level of Names[®] XC will result in extremely strong expansion, with reduced strength, high porosity and reduced frost resistance.

Compatibility

Names[®] XC is compatible with Portland cement and hydraulic binders, including ground blast furnace slag, fly ash and hydrated lime.

Health & Safety

Names[®] XC is alkaline and reacts with water under development of heat. Avoid contact with skin or eyes and wear protective gloves and goggles. In case of contact with eye flush immediately with plenty of water. Refer to Material Safety Data Sheet for full details.

Storage

Names[®] XC is sensitive to moisture and should be stored in cool, dry conditions.

Packing

In Big Bags of 1000 kg. Bulk is possible.

The above information and recommendations are based upon our experience and are offered merely for advice. They do not absolve the consumer from making his own tests. Responsibility for damage arising from the use of our products cannot be derived from the recommendations given. The observance of any intellectual property rights of third parties is the responsibility of the consumer in each case.

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