



## Product information

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### **Names<sup>®</sup> XA**

**Expansive additive for reduced thermal shrinkage of cement-based products.**

#### **Description**

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

Names<sup>®</sup> XA reacts with water with expanding volume.

#### **Chemical composition (M.-%, approx.)**

MgO	> 80
SiO <sub>2</sub>	4
CaO	5
Fe <sub>2</sub> O <sub>3</sub>	2
Cl	< 0,1

#### **Physical properties (approx.)**

Appearance	reddish, easy handling and flowing powder	
Specific density	3,6 g/cm <sup>3</sup>	
Bulk density	0,6 g/cm <sup>3</sup>	
Particle size	> 200 μ	< 1 %
	< 90 μ	> 80 %

#### **Function**

Names<sup>®</sup> XA reacts 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 cooling phase.

#### **Advantages**

Depending on the addition level:

- reduced shrinkage
- increased impermeability to water
- increased mechanical strength
- ease of handling



## Applications

Names<sup>®</sup> XA can be used in a variety of applications, such as:

- high density mortars and concrete
- industrial flooring
- tile adhesives
- flooring
- self-healing cracks in concrete

To give the required expansion, it is necessary to assure enough availability of water over long periods.

## Addition level

Typical addition levels are 3 – 6 % 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<sup>®</sup> XA.

A too high addition level of Names<sup>®</sup> XA will result in extremely strong expansion, with reduced strength, high porosity and reduced frost resistance.

## Compatibility

Names<sup>®</sup> XA is compatible with Portland cement and hydraulic binders, including ground blast furnace slag, fly ash and hydrated lime.

## Health & Safety

Names<sup>®</sup> XA is alkaline and should be handled like other cements. 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<sup>®</sup> XA is sensitive to moisture and should be stored in cool, dry conditions.

## Packaging

In bags of 20 kg, or big bags of 1000 kg.

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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