



## Product information

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### Newchem ACC

#### Accelerator

for very fast setting and fast hardening of cement-based products.

#### Description

Newchem ACC is based on different Aluminate Cements and was developed to accelerate the setting time and early strength of cement-based products.

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

Al <sub>2</sub> O <sub>3</sub>	33 – 35
CaO	40 – 42
SiO <sub>2</sub>	8 – 9
SO <sub>3</sub>	10 – 12

#### Physical characteristics (approx.)

Colour	cream
Bulk density	350 - 600 kg/m <sup>3</sup>
Particle size distribution	d <sub>10</sub> < 5 µm
	d <sub>50</sub> < 15 µm
	d <sub>90</sub> < 50 µm

#### Function

The reaction of Newchem ACC happens very fast. For an acceptable open time, the addition of suitable retarders is required. This allows the user to determine the working time. We suggest the addition of Denka D200.

Given the use of enough water, the ettringite formed gives an increased volume. This leads to less shrinkage during drying.

#### Advantages

Depending on the addition level:

- fast and very fast setting time
- high and very high early strength
- low shrinkage
- increased durability
- good bonding properties

and ease of handling.



## Application

Newchem ACC may be used in a variety of applications, such as

- repair mortars
- grouts
- water stop mortars
- post fix
- 3D printing

## Addition level

Properties depend on the ratio of Newchem ACC to OPC. Typical addition levels are 7 – 10% replacement by weight on the cement weight, depending on the required properties. Due to the fast-setting nature of Newchem ACC, it is highly recommended to perform laboratory trials to determine the correct addition level and to optimize the balance between retardation and acceleration.

Adding too much Newchem ACC will result in extremely rapid set times and very high early strengths.

Important: Newchem ACC has extremely fast setting properties. Therefore, to achieve acceptable setting times, a suitable retarder will have to be incorporated at a slightly higher dosage than those normally recommended. We suggest 0,3 – 0,9% Denka D200 on the cement weight.

## Compatibility

Newchem ACC is compatible with Portland cement and hydraulic binders, including ground blast furnace slag, fly ash and hydrated lime.

## Health & safety

Newchem ACC is alkaline and should be handled like cements. Avoid contact with skin or eyes and protective gloves and goggles should be worn. In case of contact with eye wash immediately with plenty of water. Refer to Material Safety Data Sheet for full details.

## Storage

Newchem ACC is sensitive to moisture and should be stored in cool, dry conditions.

## Packaging

In 25 kg bags, 40 bags per pallet, or in big bags of 1000 kg (on request).

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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