

## **ALPHAMENT**

### **Product Properties:**

**ALPHAMENT®** is micronized calcium carbonate based on natural, very pure reef lime, which was formed millenniums ago. **ALPHAMENT®** has a perfect grain distribution as well as an optimal grain structure to improve the processing of concrete. **ALPHAMENT®** reacts as activator in concrete mixtures by improving the technological performance, the mechanical properties and the surface of formulated concrete. **ALPHAMENT®** is used in all concrete applications ranging from very simple to highly sophisticated concrete. **ALPHAMENT®** is particularly used at precast and ready mix concrete plants but also at concrete building sites.

## *CO<sub>2</sub>- emission reduction by calcium carbonate*

### **Key Benefits at a glance:**

- Optimisation of water/cement ratio
- Cement amount reduction in concrete
- Improved facing of the concrete
- Reduced concrete deformation risk
- Increasing of 24-hour-strength
- Improved processing of concrete
- Very practicable by precast and ready mix



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## ALPHAMENT

### Introduction:

**ALPHAMENT®** is a finely divided and dried calcium carbonate. It is the finest constituent of the concrete aggregates and improves the mechanical, rheological and aesthetical performance of finished products. **ALPHAMENT®** accelerates the formation of the main hydrated components of cement due to optimized porosity. Fly ash can be exchanged partly or even completely by **ALPHAMENT®**. The natural color contributes positively to the final color of the concrete. **ALPHAMENT®** acts as a catalyst for mechanical resistance at short periods (<7 days) for mixtures but does not act as a source of silica to react with part of the hydrated cement and develops resistance at 28 days or longer (non pozzolanic effect).

### Chemical and Physical Data:

Name of product	Sieve residue >90 µm [%]	Whiteness Ry	Spec. surface Blaine [m <sup>2</sup> /g]	Moisture [%]	Bulk density (untamped) [g/ml]
<b>ALPHAMENT 10 KA</b>	0	85	0,4	< 0,2	0,9
<b>ALPHAMENT 300 IN</b>	5	77	0,5	< 0,2	1,0
<b>ALPHAMENT 330 IN</b>	10	75	0,5	< 0,2	1,1
<b>ALPHAMENT 902 E</b>	2	50	0,5	< 0,2	1,0
<b>ALPHAMENT 905 E</b>	5	50	0,4	< 0,2	1,0
<b>ALPHAMENT 910 BN</b>	10	60	0,4	< 0,2	1,0
<b>ALPHAMENT 915 E</b>	15	50	0,3	< 0,2	1,1
<b>ALPHAMENT 915 A</b>	15	65	0,2	0,3	1,1

### Application examples\*:

#### **Dry concrete:**

- Applications: breeze-blocks, blocks, borders and pipes
- Optimized as granulometric corrector

#### **Plastic and additive concretes:**

- Applications: paving stones, pits, gutters, beams.
- Recommended for CAM I classes 42.5 or above

#### **Liquid and technical concretes:**

- Applications: self-compacting concrete, small architecture items
- Optimisation of granulometry and viscosity

\*-Basic formulations are presented in Technical notes. Construction information – 11/18 Ed. 1



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