



Rev 0
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AETERNUM CSA

Special fire-fighting plaster



DESCRIPTION

AETERNUM CSA is a new generation reactive formulation in powder adsorbed on active nanomicrosilicates that combines, to the high pozzolanic activity of the latter, an extraordinary rheology and fluidity in the absence of segregation, impermeability and considerable resistance to both mechanical compression and chemical and atmospheric aggressions and above all an extraordinary impermeability.

Ideal for formulating mortars and concretes with high durability.

For hot climates it is recommended to do preliminary tests.

FEATURES

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HOW TO USE

AETERNUM CSA finds its main applications in all quality concretes and mortars, where homogeneous concretes are required, superfluids with a very low a/c ratio, with excellent visible finishes, impermeable to external aggressive agents, with compensated shrinkage, of high resistance to bending and compression.

AETERNUM CSA is used in the preparation of:

- protective executioners
- executioners for consolidation injections
- expansive plywood shrinkage grouts
- [mortars or concretes with high mechanical strength](#)
- mortars or concretes with high impermeability
- prestressed concretes resistant to chemical aggression
- concretes for rampant formwork (slip-form);
- mortars or concretes for underwater applications especially in aggressive environments
- thixotropic mortars for restoration
- anti-shrinkage mortars, both pre-mixed and wet

However, on every occasion in which the mortar or concrete is required to perform superior performance, such as:

- [mechanical resistance](#)
- chemical resistance
- resistance to wear and cavitation
- [total impermeability, even to air](#)

SHEET



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- stability and cohesion
- compensated withdrawal
- [overall durability](#)

It is also used to reduce the bleeding of concretes, in pumpable concretes and in concretes with high mechanical and durability characteristics.

AETERNUM CSA is also particularly recommended for concretes in which the particle size distribution has an evident lack of fine.

PECULIARITY

AETERNUM CSA, despite the very small particle size:

- it does not require the simultaneous use of superfluidifiers indeed thanks to the same it is possible to have self-compacting concretes at very low dosages of water;
- gives concrete greater workability;
- facilitates pumping;
- guarantees high mechanical strength without plastic shrinkage;
- guarantees better face view and degree of finish;
- guarantees greater impermeability;
- guarantees durability and therefore resistance to all exposure classes.

PHYSICAL PROPERTIES

	Dust physical state
	Silvery color
Particle size distribution	0-30 µm
Density in pile	350-550 g/dm ³
Solubility in	insoluble water
pH	6 ± 1
Specific surface	20-30 m ² /g

DOSAGE

The dosage of AETERNUM CSA is on average from 0.6 – 4 % on the weight of the cement depending on the mixture to be added and the desired characteristics.

However, it is always advisable to carry out preventive orientation tests .

CONCRETE SEASONING

The reactions in the pozzolanic environment are quite long and take place in a humid environment; for this reason a correct seasoning of the mortar or concrete is required in order to avoid too rapid drying.

In this regard, it is advisable to protect the castings, during the first hardening phase, with polyethylene sheets and then apply a TEKCURING or TEKNAPUR film on the exposed surfaces , which will avoid a rapid evaporation of the jets, allowing a correct pozzolanic reaction to them.

PACKS

Bulk in tanks.

Big-bags 700 - 800 kg

Bags 9 - 10 kg

STORAGE AND CONSERVATION

AETERNUM CSA, if stored in a dry place and in the original perfectly closed bags, is valid for 12 months.

The moisture eventually adsorbed by the product does not affect its effectiveness, but makes its dosage difficult and inaccurate as well as a homogeneous distribution in the finished mixture.

It is therefore advisable to close the bags carefully after each withdrawal.

AETERNUM CSA is available in bulk, in big-bags or bags.





The bulk product is transported with the classic torpedoes and can be stored in normal cement silos and dosed with the equipment of the batching plant or with a screw system for bigbags.

WARNINGS

AETERNUM CSA is harmless on contact with the epidermis. It is easily removed with soap and water from any surface. By inhalation it can cause a slight irritation of the upper respiratory tract so the use of the dust mask is recommended. In case of accidental loss, it must be collected in the dry state and disposed of in an authorized landfill.

LEGAL

The information contained in this technical sheet, although representing the most advanced stage of knowledge, does not exempt the user from performing accurate preliminary tests in their conditions of use and operation. We therefore decline any responsibility for the improper use of the product.

