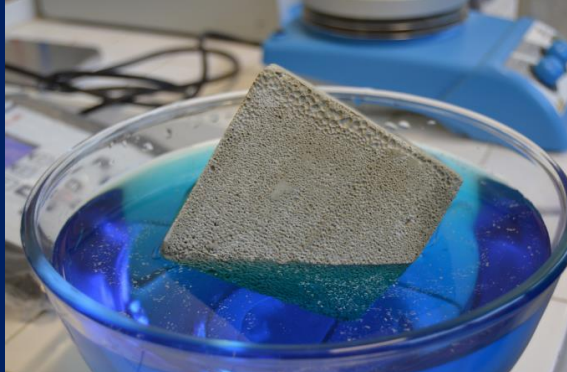




Rev 0
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AETERNUM LEVIS

High efficiency reactive formulation for mortars and cellular cements and lightweight concretes with high durability (reactive powder concrete, RPC)



DESCRIPTION

AETERNUM LEVIS is a new generation superfluidifying carboxyl compound, in powder form, adsorbed on active nanomicrosilicates, which combines the high pozzolanic activity of the latter with a unique rheology, a non-segregating fluidity, a resistance to mechanical compression and chemical and atmospheric aggression and, above all, an exceptional impermeability of the cement matrix.

FEATURES

AETERNUM LEVIS is composed of spherical particles the size of a few hundredths of a micron, so the specific surface is high: over 220,000 cm²/g (Blaine). This characteristic gives a high dispersion, reactivity on cement grains and a high ability to capture and fix calcium hydroxide [Ca(OH)₂] and to transform it into hydrated silicate and subsequently into stable and irreversible calcium silicate.

Note that in all doughs containing cement, in order to achieve good workability, it is necessary to use an amount of water always higher than that necessary for the hydration of cement, which causes the formation of capillaries and cavities in the hardened cement paste much more numerous than the amount of water used.

Thanks to its high specific surface, AETERNUM LEVIS, having a phase transfer agent inside, ensures, without the use of additional superfluidifiers, easily and good workable concretes, without shrinkage and with superior and lasting final performance.

Considering the chemical conformation of AETERNUM LEVIS (which accelerates the hydration of cement) an initial qualification for the summer season is recommended. When AETERNUM LEVIS is added to the dough at the rate of 2-4% on the weight of the cement, it captures and reacts with free lime, filling the voids of the cement paste, making the conglomerate more compact, waterproof and resistant and therefore more durable over time and with a better appearance. This additive makes it possible to produce rheoplastic concretes and rheodynamic SCCs with a very low e/c ratio.

FIELDS OF APPLICATION

AETERNUM LEVIS is mainly used in light concrete and aerated concrete mortars. High performance for cement paste, therefore impermeable to aggressive external agents, compensated shrinkage, high resistance to bending and compression.

ADVANTAGES

AETERNUM LEVIS, despite the very small particle size:

- gives the cement paste greater workability;
- facilitates pumping;
- ensures the cement paste a high mechanical resistance without plastic shrinkage;
- guarantees greater impermeability of cement paste;
- ensures greater durability of the cement paste.

SHEET



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SPECIFICATIONS

	Dust Status
	ColorSilver
Particle size distribution	0 – 30 µm
Density	400 – 600 g/dm ³

DOSAGE

The dosage of AETERNUM LEVIS is on average 2-4% of the weight of the cement, depending on the mixture to be added and the desired characteristics. However, we recommend 3 - 3.5% of the weight of the cement as an ideal dosage. Different doses may be used after the recommended preventive orientation tests.

CONCRETE SEASONING

The reactions in the pozzolanic environment are very long and take place in a humid environment; for this reason, adequate seasoning of the mortar or concrete is necessary to avoid too fast drying processes.

PACKS

Bulk in cisterns
Big-bags 600 kg
10 kg bags

STORAGE AND CONSERVATION

AETERNUM LEVIS, when stored in a dry place and in the original perfectly closed bags, is valid for 12 months. Any moisture absorbed by the product does not affect its effectiveness, but makes it difficult and inaccurate to dose and distribute homogeneously in the finished mixture. It is therefore recommended to close the bags thoroughly after each sampling. AETERNUM LEVIS is available in bulk, in big-bags or in bags. The bulk product is transported with conventional torpedoes and can be stored in normal cement silos and dosed with the equipment of the batching plant or with a big-bag auger.

WARNINGS

AETERNUM LEVIS is harmless to the skin. It is easily removed with soap and water from any surface. Inhalation may result in slight irritation of the upper respiratory tract for which the use of a dust mask is recommended. In case of accidental loss they will be collected in the dry state and disposed of in landfills.

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.

