



Rev 0
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AETERNUM CABLE P.U.

Reactive highly efficient ready-to-use superfluid compound, to be injected with very high initial and ultimate mechanical strengths, with high volumetric stability and durability (Reactive Powder Concrete, RPC)



DESCRIPTION

AETERNUM CABLE P.U. is a new generation, ready-to-use, reactive compound, which combines a selection of inorganic binders with active nano-micro-silicates. It features very high reactivity, extraordinary rheology, fluidity without segregations, volumetric stability, noticeable resistance both to mechanical compression and chemical and atmospheric damage and above all extraordinary impermeability.

With very low water needs, it is possible to obtain grouts to be injected, free of bleeding and shrinkage. Such mixtures also make it possible to reach extremely high mechanical strengths, protection from "stress corrosion" and outstanding adhesion to steel.

This product is free of chlorides and expansive metallic agents

FEATURES

AETERNUM CABLE P.U. is made of spherical particles, the size of a few hundredths of micron, up to over 222,000 cm²/g (Blaine). It features high dispersion and reactivity with high ability to capture and fix the calcium hydrate [Ca(OH)₂] to form stable and irreversible calcium-silicate-hydrates.

It should be said that in all cement-containing mixtures, in order to achieve good workability, one must use an amount of water, which is always higher than the one needed to hydrate cement. It causes the formation of capillaries in the cement paste, and the larger the amount of water is, the more numerous they are.

Since it has a phase transfer within, AETERNUM CABLE P.U. ensures easy-to-work concretes, without shrinkage and with better and more durable final performance, without needing to use superplasticizer admixtures nor large amounts of water.

Since it does not contain free lime and is superfluid at very low w/c ratios, AETERNUM CABLE P.U. features an extremely resistant, solid, totally impermeable, and therefore durable hardened phase.

AETERNUM CABLE P.U. is totally impermeable, even to air.

APPLICATIONS

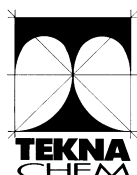
AETERNUM CABLE P.U. is mainly used for structural injections, whenever homogeneity, superfluidity at an extremely low w/c ratio, impermeability to aggressive external agents, compensated shrinkage and flexural and compressive strengths are requested.

AETERNUM CABLE P.U. is used as:

- protective grout
- grout for consolidation injections

providing excellent performance in terms of:

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



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- compensated shrinkage
- [overall durability](#)

PECULIARITIES

AETERNUM CABLE P.U. :

- [does not](#) require any superplasticizer;
- [is superfluid](#) at very low water dosages;
- is [easy](#) to be pumped;
- [ensures](#) high mechanical strength without plastic shrinkage;
- [ensures](#) impermeability;
- [ensures](#) durability and therefore resistance to all exposure classes.

PHYSICAL PROPERTIES

State	powder
Colour	grey
Particle size distribution	0-30 μm
pH	12.5 \pm 1

DOSAGE

AETERNUM CABLE P.U. is ready to use.

Our advice is to add water gradually while stirring, beginning with 3.50 Lt/bag.

Let it mix thoroughly for a few minutes and correct fluidity as desired by adding small quantities of water, without exceeding 5.0 Lt/bag.

STORAGE

If stored in dry and indoor place (sheltered from the elements), in its original and perfectly sealed bag, AETERNUM CABLE P.U. is valid for 6 months.

The absorbed moisture affects its efficiency, we therefore suggest that you accurately close the bags after each picking.

PACKAGES

25 kg bags

Upon request it is also available in big-bags or bulk in tanks.

WARNINGS

While dosing the product, we suggest that you wear a dust mask and gloves.

In case of accidental loss, the product must be picked up dry and then disposed of in an authorised landfill.

LEGAL NOTICE

Information contained in this technical data sheet, even though it represents our most advanced stage of knowledge, does not exempt the user from running accurate preliminary tests under their own conditions of use and operation. We therefore decline any responsibility for the improper use of the product.

