



MEGAMIX GEL 1000



Applications

Slurry/gel containing silica fume GEL1000, used in strong, precast concrete, resistant to chemical attacks (chloride, sulfate, alkaline reaction with aggregate, etc.), concrete with low water permeability, concrete with high durability, and concrete resistance properties.

The use of silica fume can lead to a reduction in water loss, a reduction in separation potential, and an increase in adhesion, which makes its use in various concretes, especially self-consolidating concrete.

The use of silica fume in concrete, by improving the microstructure of cement paste as well as the structure of concrete pores, can lead to a decrease in permeability (in conditions of positive and negative pressure of water and humidity, and the release and attack of various ions such as chloride and sulfate), a sharp increase in electrical resistance, and improve the mechanical and resistance properties of concrete.

This product can be used in all kinds of concrete structures such as docks, drinking water tanks, water and sewage treatment plants, water retaining structures, sewage tanks, retaining walls, dams, tunnels, underground structures, coastal and offshore structures, parking lots, piles, foundations, elevator shafts, prefabricated parts, etc.

Silica fume is also used for concrete structures and concrete parts that are exposed to corrosive and erosive environments.

Dosage

The consumption of GEL1000 is recommended in the amount of 5 to 20% of the total weight of cement materials. The amount of consumption is obtained according to the implementation conditions, the mixture design, the amount of silica fume required and laboratory tests.

Lower consumption amounts (powder equivalent less than 5%) can be used for various purposes such as improving the properties of fresh concrete, increasing concrete strength, improving pumpability in low-cement or low-fine-grained concrete, etc., but possible undesirable effects should be considered. Considered the durability of concrete.

Method of Use

GEL1000 silica fume slurry/gel should be added to the mixture at the same time or after adding all the components. Be careful to mix this additive in concrete or mortar in such a way that it spreads evenly throughout the mixture.

How to maintain

Store in a covered place, at a temperature of 5 to 35°C, away from direct sunlight, and inside the package. Under proper storage conditions and in the original packaging, it can be consumed up to 12 months after production.

Packaging:

20 kg gallon / 220 kg barrel / 1000 kg tank

Technical support

We are ready to provide related technical services in the workshop if needed.

Compatibility

If you need to use it simultaneously with other admixtures, be sure to contact the technical support department.

Standard

Silica powder (microsilica) of this product meets ASTM C1240, INSO 13278 and EN 13263 standards and its superplasticizer meets ASTM C494: Type F & G standards, as well as INSO 2930-2 (tables 3 and 11) and EN 934-2 (tables 3 and 11) corresponds.

Technical features

Product type: liquid (slurry/gel)

Color: Gray

The amount of silica fume: 40 to 45% of the weight of the slurry/gel (according to the conditions and needs of the project)

Amount of superplasticizer: According to the needs of the project

Amount of consumption: 5 to 20% of the weight of cement materials (according to the amount of silica fume in the slurry/gel)

Specific mass (kg/L): 1.20 ± 0.05

Amount of chloride: negligible (less than 0.1 percent)

Alkali content: less than 5%

The amount of aeration: less than 2% according to the amount of consumption