



Classic Enterprises

IMPORTERS & EXPORTERS

MEMBER - Indian Merchant Chambers

TECHNICAL DATA SHEET NATURAL GYPSUM

UNE 102031/ 82

Raw materials and description:

The **natural gypsum stone** is a mineral formed by di-hydrated calcium sulphate. In its crystalline structure there are two water molecules by one of calcium sulphate. Put under calcination (120-160 °C), it releases part of the crystal water, obtaining itself a **semihydrate** of calcium sulphate or "**burnt gypsum**", that being mixed with water, is solidified again and crystallized, reconstituting the original rock in its natural state. The plaster is a gypsum variant, finer, white and of greater hardness than normal gypsum, employed like material of ornamentation and with other stucco additives.

"**Black gypsum**" is the traditional name for an artisan semihydrate, that is obtained from natural mineral. It contains more impurities than **white gypsum**, it is of grayish color, and suitable for the first layer in the inner plasters of the constructions. It's also suitable for to use in mortars.

"**Dead gypsums**" are those submissive to industrial processes and higher temperatures of calcination, from 300 to 700 °C or superior (if so by-products of the industry of cement and with chemical additives and retarders), thus form different more or less insoluble **anhydrite** classes, of greater resistance, little porosity and incapable to regulate environmental humidity, with the consequent danger of condensation and formation of fungi.

Due to this, for works of restoration and eco-building, as gypsum-lime or plaster stuccos, are only due to use natural burnt gypsums:

Given its porous structure, crystallized natural gypsum contributes exceptional bio-climatic properties. Its excellent qualities of isolation and hygrometric regulation, directly do of it an irreplaceable material in the restoration and eco-building, being used directly on the walls or like mortar. Its high plasticity confers to it infinity of possibilities in decoration. By its bio-climatic and natural properties, the natural gypsum coatings contribute to the comfort, creating a healthy and balanced climate and atmosphere in livings and other interior spaces.

Technical qualities of our natural gypsums:

UNE 102031/82	White gypsum (fine)	Black gypsum (thick)
aspect	polvo blanco	grey powder
Index of purity	> 75%	87,7%
Time of delay (minutes)	< 8 min	4'35''
Time of use (minutes)	> 10 min	7'07''
Compression strenght	> 2,0 N/ mm2	18 kgf/cm2
	> 1 MPa	-
Determination of the PH	> 6	>7
refinement	retention 800 micras: 0% retention 200 micras: 15%	31,4%
Bound water content	> 6%	5,2%

Precautions in its application:

Conserve the product in its original package.

To store the bags in dry and protected areas.

Use potable water and clean containers.

Apply on surfaces completely free of impurities.

Don't mix with cement.

Avoid the application on cement surfaces that still are not totally dry.

It is possible to be mixed with low sulphate limes, especially with slaked limes.

Don't dry artificially.

When working in atmospheres little ventilated the use of protection mask is recommended during the preparation processes, generating of dust.

Don't apply in humid cellars or surfaces exhibited to the water.