



PRODUCT N°: 1.594

HUMPROT-HYDRO

WATER BASED HYDROFUGING PRODUCT FOR SURFACE TREATMENTS

Characteristics:

HUMPROT-HYDRO is a liquid, clear to slightly yellowish, water based hydrofuging product which has been formulated with additivated potassium methylsiliconate and is especially designed for achieving hydro-repellent surfaces by surface application while treating materials.

HUMPROT-HYDRO does not form continuous films on the surface which could prevent the circulation of water vapour, but penetrates into the support where, since it remains on the walls of the capillarity net, the product repels water and hardly alters the vapour transmission rate of the support and allows what is usually known as the breathing of the substrate.

The clear – slightly yellowish appearance of **HUMPROT-HYDRO** allows treatments which do not usually alter or affect the initial colour of the treated materials; however, it's necessary and nearly compulsory the previous testing considering the range of materials which could be treated with **HUMPROT-HYDRO** and the amount of **incompatibilities** which could appear with other usual materials in construction.

Field of application:

The uses of **HUMPROT-HYDRO** as a surface treatment to supply the materials with hydro-rejecting properties are, among others:

a.- surface treatment for construction materials in order to make them water-repellent with the reduction of absorption. We get very good results in applications on materials such as natural and artificial stone, pre-cast blocks, etc. In every case, it is necessary to make a previous test before treatment.

It is not recommended to use this product for treating external walls (façades) in buildings made of plain brick, since the uneven application while treating may cause the appearing of surface white stains which are quite difficult to remove afterwards.

b.- treatment of clay elements with low boiling point, such as roof tiles, non-vitrified tiles, pots, etc., in order to supply them with water-repellent properties.

Method of use:

Due to its water base, it's not necessary for the surfaces to be completely dry. However, it's important to consider that the deepness of the treatment will get reduced when the water contents of the substrate gets higher when applying **HUMPROT-HYDRO**. Excessive dampness in the substrate may prevent completely the hydrofuging treatment.

HUMPROT-HYDRO is habitually used previously diluted in water. Doses will depend on the desired hydrofuging degree, on the porosity of the material, on the absorption rate and on the applicability.

As a general idea, for the above mentioned used, the method of use and the recommended doses would be:

.- surface treatment for construction materials: dilutions between 15 and 25% of **HUMPROT-HYDRO** in water, applied with tankesprayer, roller, brush or spray without air pressure.

In order to find the most suitable dilutions, depending on the required water-repelling degree, it's recommended always to carry out a previous test, since the optimum doses are quite different

depending on the materials. It's possible to achieve excellent results on some materials with even lower doses than the above mentioned. When preparing the dilutions of **HUMPROT-HYDRO** in water, it's recommended to use soft waters, with hardness below 20 °F. The most suitable way to prepare the dilutions of **HUMPROT-HYDRO** is to pour **the water first** in the dilution pot and then slowly add the needed amount of **HUMPROT-HYDRO** while shaking.

In case of raining before 24-48 hours after applying there may be a possible washing of the product thus removing totally or partially the water-repelling effect. Do not apply in summer on surfaces which are directly exposed to sunrays, or in very windy days, since the penetration into the substrate may be affected.

.- treatment for turning water-repellent elements and materials made of low cooking point clay: use after dilution with water between 2-5 % by immersion for a period of about 45-60 seconds. Not all the clay-based materials are suitable to be treated with this product. It's essential to know the contents of free lime and the pH of the material to be treated.

Yields:

The yields when applying **HUMPROT-HYDRO** depend highly on the absorption power of the material to be treated and, as a result, the necessary amount for reaching saturation of the substrate strongly changes depending on the material. Just as an orientation, we can indicate yields of about **3 to 6 m² per litre** in surface treatments for most of the tested materials.

Precautions:

Corrosive product, causes severe burns. Irritating to eyes and skin. Keep out of the reach of children. Avoid contact with eyes and skin. In case of contact with eyes, wash immediately with plenty of water and seek medical attention.

Packaging:

HUMPROT-HYDRO is packaged in non-reusable plastic containers with **12, 30 and 240 kg** net weight.

ADVANTAGES

***** Easy to apply.**

***** Aqueous water-repellent.**

***** To be diluted with different amounts of water.**

***** Long lasting on the suitable supports.**

***** It does not usually alter the appearance of the materials where it's applied.**