

KEMIDERM NMF VEGETABLE

Natural Moisturizing Factor

A skin with the right degree of hydration is easier to permeate than a non-hydrated one. This proves that it is important to act on hydrated skin if we want a cosmetic product to be able to work effectively.

For this reason a cream created to keep the right hydration balance is also useful to help the absorption of other functional products.

Studies conducted by important researchers underlined that a skin with the right degree of hydration, as opposite to a dehydrated one, has a higher concentration of specific beneficial substances.

These substances responsible for skin hydration are called natural moisturizing factors (NMF).

NMF is made up of different natural substances able to hold big quantities of water bonding it to some skin structures.

These substances are:

polycondensated amino acids and sugars, P.C.A. Urea, Alfa hydroxy acids mineral salts

ORIGIN

Kemiderm NMF Vegetale (Vegetal Moisturizing Factor) is chemically made up of a mixture of active functional substances for moisturizing the skin (amino acids, PCA sodium salt, natural sugars, α -hydroxy acids, etc.)

The main characteristic of the moisturizing factor we present is the fact that it is practically totally vegetal, considering that not only the sugar portion and the α -hydroxy acids mix are vegetal extracts, but also the protein component (low molecular weight polypeptides and amino acids) which is under the form of a protein lycine of wheat gluten.

Another fundamental feature and an important point regarding the quality of the product is that it does not contain preservatives, stabilisers and colouring agents.

APPLICATIONS

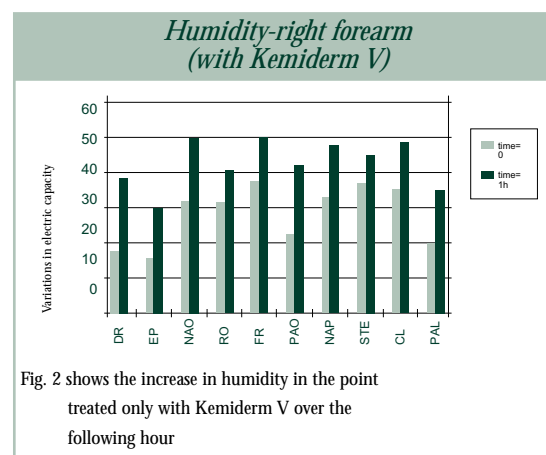
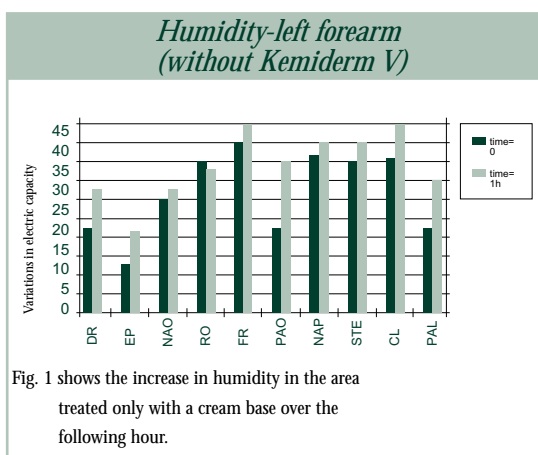
Kemiderm NMF Vegetale, used with foundation creams, could be extremely useful in order to avoid the pigments in the formula desiccating and drying the skin.

Also when formulating lotions, after-shave or after-hair removal creams, the use of our moisturizing factor could be suitable, in the sense that it would replace that amount of humidity removed the previous mechanical or chemical treatment.

In trichotechnical products, the use of such a moisturizing factor could be felt necessary in making shampoos, creams or lotions for dry hair or phials for rubbing into a dry scalp.

SKIN MOISTURIZING EFFICIENCY TESTS*, USING THE "SKIN DIAGNOSTIC SD 27"

*10 volunteers



Comparison of humidity with and without Kemiderm V After 1h

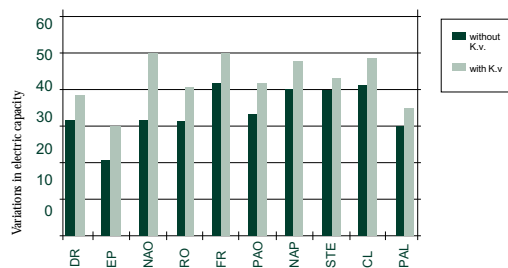


Fig. 3 clearly shows the increase in humidity reached during the hour following application of Kemiderm V, compared with the action of only the cream base.

Comparison of humidity with and without Kemiderm V After 1 Week

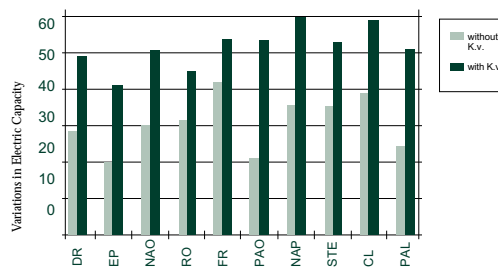
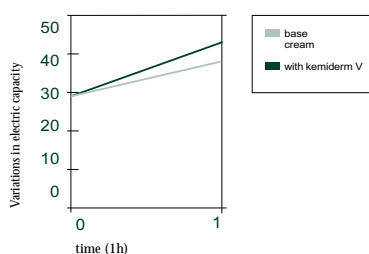


Fig. 4 clearly shows the marked increase in humidity following the action of Kemiderm applied regularly during the week following the beginning of the test.

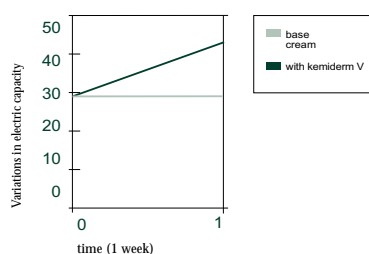
CONCLUSIONS

Kemiderm V cream is noted for its particular high quality moisturizing capacity and, if used regularly, excellent results can be achieved as is shown in figure 5 below:

Moisturizing in crease with and without Kemiderm V After 1 h



Moisturizing in crease with and without Kemiderm V After 1 week



INCI NAME (UE):

Aqua, Urea, Glucose, Sodium PCA, Sorbitol, Fructose, Hydrolyzed, Wheat Protein, Sodium Glutamate, Glycine, Lysine, Malic Acid, Tartaric Acid, Citric Acid, Glycolic Acid, Lactic Acid, Sodium Hydroxide, Potassium Hydroxide

ORIGIN: Vegetal
 FUNCTION: Moisturiser
 CATEGORY: Active functional principles

PHYSICO-CHEMICAL CHARACTERISTICS

ASPECT: Clear liquid
 Syrupy transparent
 COLOUR: Dark yellow
 ODOUR: Very slight
 DIRECT PH: 4.5 – 5.5
 DENSITY: 1.19 – 1.26
 TOTAL NITROGEN: 8 – 9
 PROTEIN NITROGEN: 1.9 – 2.5
 GLYCOLS: Absent
 TITRE: 53.2 – 56.6
 VEHICLE: PUR./DEM WATER

MICROBIOLOGICAL CHARACTERISTICS

TOTAL MICROBE COUNT (UFC/ml): 0 – 10

DOSAGE

2 - 10% (the dose must undoubtedly be near the highest if used as a product to "attack").

TOLERABILITY

Kemiderm NMF Vegetale can be considered as a completely safe active principle in cosmetics or pharmaceutical products for local use in that it is non toxic (its DL50 is > 5000 mg/kg pc), non irritant or sensitising not even if used in doses higher to those usually prescribed in cosmetic prescriptions.