

NEVADO PLUS

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INTRODUCTION

Some of the following methods have been used to achieve the snow top effect:

- **Dyeing with metallic salts**, usually lead and later a brush or a spray treatment with a suitable chemical solution product to transform the colored metallic salt into another white salt.

This process presents the disadvantages the contamination with the metallic salt, little control in the achieved color in the leather, in the wool and also a very limited range of color.

- **Dyeing with dischargeable dyes**, usually disperses dyes which are easily destroyed with the application of spray or brush reduction solution. This process presents the disadvantages of obtaining not many reproducible colors because of the lack of Reactivity of these dyes for wool, dirty suede and hard for the adsorption of the dye of the leather and rough wool because of the reducing agent action.

- **The application of Resins**, which act as a physical barrier. They are insoluble hot, with those which are resistant to dyeing and soluble in cold to later rinsing.

The resins have the inconvenience of not being so insoluble with heat to guarantee the process not so soluble with cold which allows to eliminate the resins easily. Its application, given the high viscosity of these resins doesn't make it very practical.

NEVADO PLUS® is a resist system which closes the structure of the wool by blocking the reactive groups of this with anionic dyes.

With this you obtain a good snow-top effect and a greater shine, in a way that the treated skins are difficult to finish off CURLING because they don't recover the primitive undulating structure of the wool.

To have a complete reaction between NEVADO PLUS and the wool, it is necessary to apply at high temperature the treated wool for a determined time.

This can be achieved by putting the skins in an adequate oven. Treated like that the skins can be dyed.

APPLICATION

NEVADO PLUS can be used, by print, brushes, or airless pistols. In this last case the flanks must be protected to avoid shrinking in the thermal treatment. The choice of method will be determined by the facilities available in the factory and above all the desired effect and the type of skin.

The print application is the ideal system because it allows to regulate the account/quantity of liquid applied to the surface and also the deepness of the treatment. At the same time you can achieve a mold design which gives a greater possibility of different effects. If the product is used with a pistol, it is essential that the skins are pressed with a cylinder immediately which also breaks the drop and will achieve the desired deepness.

The deepness of the distribution is very important to obtain the different effects because the aspect of the skin differs depending on the penetration of the white. In general the deepness is greater if the skins are past against wool direction. You must be careful not to wet the suede because after the thermic treatment this would leave irreversible stains.

This product is hygroscopic and therefore the skins must not be piled without placing something in between to separate them.

To achieve this, the skins are usually passed through the machine on paper or carton, the skins are left on the paper or carton until the end of the process. When we deal with long haired skins, the treatment must be quite deep because we want three colour/tritone effect, it is advisable to pass the ironed skins in one direction. The amount of treated products vary according to the deepness and the type of hairs and also the intensity of the desired effect but it is usually between 10 and 20g/foot² (squared).

DRYING

With NEVADO PLUS the wet skins must be dried before the thermal treatment procedure. This drying can be done at any temperature below/under 80°C. choosing the right system according to the facilities of the factory. In the studies about the importance of the temperature of drying, it shows that there is no great/big difference in the final result by varying the drying temperature. The object is to eliminate the solvents so later thermal treatment is regular.

If traces of liquid remained in these parts, the thermal treatment would not reach the programmed temperature until the total evaporation of the liquid, which the duration of the thermal treatment would be shorter; this point is important which brings us to the next point.

THERMAL TREATMENT

For the reaction to be complete the treated wool with NEVADO PLUS and dried, it is treated thermally. The intensity of the treatment for a determined amount of the applied product is proportional to the temperature and the time.

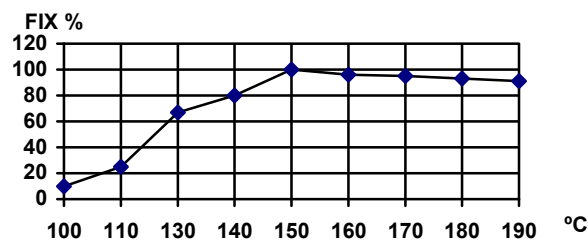
Both parameters have been carefully studied to establish the optimum relation, established at 160°C during 100 seconds.

In the graphs below show how the quantity of NEVADO PLUS varies with the time and temperature.

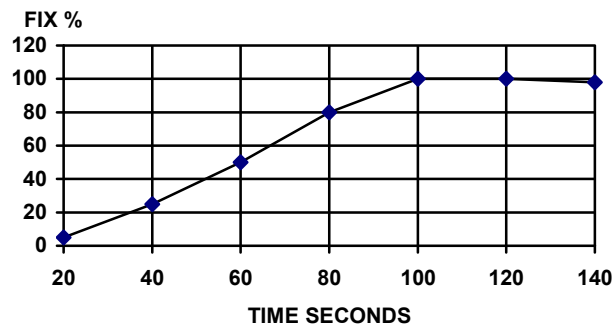
Both the temperature and the time have their limits of which it is not recommended to pass.

For example, temperatures above/over 160°C increase greatly the yellowish in the wool, without increasing the effort of NEVADO PLUS

Nevado Plus FIXED/TEMPERATURE



Nevado Plus FIXED/TIME



The treatment time can vary depending on the skin temperature, the account of hair, etc., which is to say, the time it takes the wool to reach the optimum temperature without the changes of these causes being very great.

TERMAL TREATMENT MACHINES

In the textile market there are machines for treatment at high temperatures to fix prints, finished resins, anti-creasing, etc. which are big in size and with air flow on both sides of the pieces.

In the case of the fur the treatment must only be done on one side to avoid the unnecessary suffering of the leather.

You need to have a chamber with a constant temperature of 160°C where you can regulate the speed/velocity of the transporter belt/conveyer belt to modify the time the skins are in the chamber.

The transmission of the heat must be done with air because direct radiation for example infra-red, makes the temperature very irregular with wool.

However, the flow of air must not be very strong because it is not a drying which needs to eliminate a great quantity of humidity, but simply to maintain a determined constant temperature in all parts of the chamber.

DYEING

The skins in this state are ready for dyeing. Before starting the dyeing the skins/wool can be rinsed, to eliminate the product and also to start the neutralization with bicarbonate or carbonate soda ash, which must be a little more energetic than normal given the acidity of NEVADO PLUS.

If the skins are retanned with the chrome before the dyeing then the neutralization will not be necessary although the washing/rinsing will be needed.

CHARACTERISTICS OF THE DYEING

A normal dyeing with LANAFUR anionic colouring allows the dyeing of the non reserved part. The colouring dosis needed will be less although it is recommended that the intensity of the dyeing is a little more intense than normal to increase the effect of the contrast.

SPECIAL EFFECTS

The skins treated with NEVADO PLUS have different reactions with various types of dyes which allows to obtaining bitone/two tone colours with only one rinse bath, when you mix these colours/dyeing with Lanafur.

In this case it is even more evident the regularity of the treatment with NEVADO PLUS.