

## CHIMOTAN JB

### Retanning copolymer based on plant extracts

#### CHEMICAL CHARACTERISTICS

<b>Appearance:</b>	Viscous liquid
<b>Colour:</b>	Dark brown
<b>Smell:</b>	Characteristic
<b>pH (sol al 10%):</b>	5,5 +/- 0,5
<b>Dry residue:</b>	38,0 % +/- 1,0
<b>Solubility:</b>	Miscible
<b>Charge:</b>	Anionic
<b>Lightfastness:</b>	3,5 – 4,0

#### PRODUCT CHARACTERISTICS

CHIMOTAN JB is a single molecule made up of a long polymer chain containing 2 polyphenolic groups of NATURAL origin stably condensed on it.

This molecule has high tanning capabilities due to the presence of polyphenolic groups, and high filling capabilities due to the excellent cross-linking ability it can perform through the polymer chain.

It is an innovative product as, during the fixation phase on the skin, it manages to form long chains that stably connect the fibers to each other, forming moderately elastic bridges.

The connection between the various molecules to form the chain occurs via the bonds placed on the two sides of the polymer chain, while the fixation on the fiber occurs via a bond created between the polyphenolic groups and the reactive groups of the skin.

During this cross-linking phase between the leather fibres, the polyphenolic groups that are too far from the protein fibers and therefore cannot connect with them remain available to form stable bonds with all the other chemical products used in the retanning phase.

For this reason, fatliquors, synthetic tannins, plant extracts, dyes etc. they find the possibility of having further attachment points on the chain that has formed.

The presence of CHIMOTAN JB in the retanning formulation allows for well-exhausted tanning baths to be obtained and the leather is fuller and more pasty, the color tones are more intense than they would be in a similar retanning where the copolymer was not present.

A very important aspect relating to the ability of the polymer to penetrate the skin is that the molecules tend to fill the empty spaces between the skin fibers before cross-linking.

We can therefore say that the distribution of polymer molecules in the skin occurs in a non-uniform manner, concentrating higher quantities of polymer in the emptier and spongier parts.

Once the cross-linking of the product has taken place and after having fixed the retanning products used on the polymer chains, an extraordinary filling of the spongy parts of the leather is obtained without however hardening the more compact parts.

The polymer has excellent penetration ability at pH values above 5.0 and at temperatures below 35 °C.

It tends to cross-link, lowering the pH value to 3.6 – 3.8 where we obtain complete fixation of the product.

The increase in temperature facilitates its cross-linking reaction between the molecules and between the fibers of the skin.

CHIMOTAN JB is stable with all anionic charge products.

Crosslinks rapidly in the presence of cationic products.

The product has a dark brown colour, but its color does not interfere with leather dyes.

Its light stability is good.

We do not recommend the use of this product in the production of absolute white leather and where very high light fastness is required.

In this case we suggest using the similar CHIMOTAN JW copolymer with retanning and cross-linking properties, but made to guarantee maximum light resistance.

## **APPLICATIONS**

Suitable for both the retanning of chrome-tanned leathers and leathers tanned with metal-free technologies or with tannings made with vegetable extracts.

CHIMOTAN JB finds advantageous applications in the creation of all types of articles where grain firmness and fiber fullness are required.

Articles for furniture, footwear, leather goods, clothing both on full grain and on splits find considerable advantages in the use of the polymer.

In fact, by exploiting its main prerogative which is to connect the fibers to each other in a stable manner and to fix all the other chemical products used in the retanning and fattening process along the chains that form between the fibres, it is possible to obtain the following advantages:

Great fullness and uniformity of the skin.

Flower still and not blowing.

Excellent exhaustion of retanning baths.

For optimal application, we suggest working on skin neutralized at pH 5.2 – 5.4 with a uniform section.

In order to exploit all the potential of CHIMOTAN JB, we suggest carrying out the entire retanning, dyeing and fatliquoring process in a single bath and discharging the retanning bath only after obtaining complete fixation of the product.

The percentages of use vary depending on the effects you want to impart to the leather, as an indication they can vary from 4,0 % to 15,0 %.

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Chemical-physical properties of the product have been determined in accordance with internal procedures by methods of analysis due to national and / or internationally recognised standards. The information contained in this data sheet are based on our current knowledge. Given the multiplicity of factors that can influence the processing and use of our products, the customer is obliged to carry out its part tests and controls. No responsibility can be taken by us for an incorrect use of the product

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