

MODERN METHODS IN FUR DYEING

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Nowadays the current trend of developing assortment of fur products is hair dyeing in a variety of colours. Therefore, acid dyes have been frequently used recently, not individually but in mixtures. Different combinations of the three primary colours of yellow, red and blue provide the possibility of a wide range of colour triad. One way of expanding the range of fur intermediate product is coloring hair in conjunction with bleaching.

Skins are dyed, and after drying and ironing them decoloring agent is brushed or sprayed. After laying, semi-finished product is thermally treated in a steam room. In the acidic environment, at high temperature dyestuff destroys and the ends of the guard hairs get discolored. In the same way one can get two- and three-colored effects of color, so-called effect – Brisa. [2]

The range of fur products is currently wide, but it should expand over time by selling more extravagant models for both men (fur coat) and women (pereliny, stole). Much attention has been paid to development of new methods of fur dyeing that enhance the competitiveness among manufacturers while developing new, more interesting models.

The purpose of research is to identify possibilities for use and application of appropriate auxiliary substances and dyes for extra hair coverage. The effects of "Brisa" and "Snow Top".

The following tasks have been set:

1) to make a comparative description of the impact of substances DERMES XL and XXL

DERMES on the structure of hair

2) to investigate received surveillance occurring in dyeing of fur with the addition of acid or disperse dyes.

Experimental pieces of semi – finished products of equal size have been taken as the object of the research. The furs taken for the experiment are " silver fox" and "arctic fox".

While doing the research, it is important to check skins for boiling temperature, as for the dyeing process, bath temperature should be 60 ° C. So, we need to bring boiling temperature to 90°C. We can raise the boiling temperature by process called chroming.

Traditional methods of tanning process are based on the use of chromium compounds. But a number of problems associated with wastewater treatment production arise because during the chrome tanning up to 35% of all used salts can get in waste water; as well as utilization and recycling of solid chromium containing waste.

The completion of retanning is controlled by measuring boiling temperature of a semi-finished product.

Fur dying process starts with the colour selection. Depending on which colours were used while dyeing, either acid or disperse, appropriate chemical reactions "Brisa" and "Snow Top" are conducted.

The difference between them is their strength which allows getting very nice effects even with difficult skins. Dermes XXL is stronger than Dermes XL and therefore more suitable for dark colors, but using it with clear colors you can provide wonderful “Snow Top” effect on skin dyed with acid dyes.

These substances are very easy to use. Spread on the ends of hair by spray or by brush, it's necessary to wait for about 15 minutes and then fix it with one of the following treatments depending on the skin you are working with and on the equipment at your disposal.

1. Iron the skins at 180 – 200 °C. After ironing the ends of hair change its color to pale yellow which disappears during the following dyeing.
2. Put the skins in a moist steam device at 70 °C for 10 – 15 minutes.
3. Place the skins in an infrared rays tunnel at 200 °C for 15 – 20 seconds.

After one of these three treatments don't wash the skins, but dye them directly with acid dyes such as SEVENDAF dyes, without forcing the dyeing; this means in

the shortest time and at the lowest possible temperature. The final pH has to be between 4 and 5.

These substances are liquids which are water soluble and heat stable. pH 1.0 – 3.0,

DERMES DCR[1]

Dye remover for “Brisa” effect on skins previously dyed with acid dyes.

Physical state – yellowish liquid, ionic activity – amphoteric, solubility – water soluble, pH – 7.5 – 9.5. Stability – stable to hard water.

The “Snow Top” process can be carried out with use of nonallergenic, acid, stripping dyes SEVENCOR NSA. SEVENCOR NSA set includes the following colours: red, blue, yellow, brown and black. The dyeing with SEVENCOR NSA dyes has to be carried out at 60 – 65 °C starting at pH 5.5 – 6.0 and reaching pH 3.0 – 3.5 after about 45 min. with formic acid.

The concentration of materials used during fur dyeing. Sodium sulphate – 10 g/l, SEVENCOR NSA (dyestuff) – 0.5 g/l, Texapon T (levelling agent) – 1 g/l, Invaderm AL (wetting agent) – 0.5 g/l.[1],[3],[4].

Conclusion

The quality of our results depends on: water pH, structure of the hair as well as the rate of penetration of each of the dyestuffs into the keratin structure.

After dyeing fur with acid dyestuff, we are not able to make “Snow Top”, only by the disperse dyestuff.

Also after spreading chemicals and keeping skins at 90 °C temperature, it is not allowed to wash skins more than 5 minutes as the “Snow Top” effect can be washed out.

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