DEVELOPMENT OF TECHNOLOGICAL BASES FOR TANNING KARAKUL WITH GLUTARALDEHYDE

J.Sh.Azimov., Sh.Sh.Shoyimov, Muxammedova Z.O.
Bukhara institute of engineering and technology
T.J. Kodirov
Tashkent institute of textile and light industry,

Annotation: *This article describes the studies and effects of glutaraldehyde on the structure of the doodle, taking into account the selected preliminary laboratory studies*

Keywords: *doodle, skins, temperature, tanning, fattening, glutaraldehyde, solution,*

Compliance with the established technological regime, proper operation and organization of production at all enterprises processing karakul.

In accordance with further advances in science and technology, as well as the best practices of workshop enterprises, adjustments have been made to the secret technology to improve the processing of skins.

To study the effect of glutaraldehyde on the structure of the doodle, it was carried out taking into account the selected preliminary laboratory studies.

To make appropriate adjustments to the new aldehyde tanning technology, karakul skins are packaged in production batches according to the following criteria:

By species: separately purebred karakul, half-breed karakul, karakulcha, karakul-karakulcha, etc.

According to the methods of canning: separately fresh-dry, salted, pickled.

By size; separately large, medium, small.

It is allowed to combine skins of medium and small sizes in one batch.

According to the thickness of the leather fabric: separately less than 0.7 mm, over 0.7 mm.

By grades: separately grades 1, together grades 2 and 3.

According to the color and density of the hair cover: separately, the skins are black, gray, gray with a rare seed coat, brown and sur, brown and sur with a rare hair cover, white, mottled.

It is allowed to combine white and gray doodles in one batch.

By groups of defects: separately normal; I groups or small defect; 2 groups or medium defect; larger defect.

It is allowed to combine normal and group I skins in one batch, or normal and small defects.

The skins are low-grade, flask, burnt, with signs of hair fluidity, moles, bald spots, as well as doodle, defective due to the deformation of the curl, are selected in separate batches

For dyeing in black, separate skins: with black hair, mottled ugly colors and gray with a large yellowness.

To highlight the leather fabric - skins with sparse hair: separately gray, brown.

For dyeing in colored tones - skins are white, gray and colored, of unattractive coloring, gray with a large yellowness.

The skins selected in the production batch undergo the following operations in the primary processing shop (in the raw material warehouse):

Weighing to determine the mass of a batch of raw materials.

Branding - on each doodle, a brand is punched from the side of the leather fabric in the head part, indicating the type and grade.

The size of the production batch, as well as the loading standards of the equipment, are set based on the weight of the skins, the capacity of the equipment and liquid coefficients.

The temperature of the working solutions is measured after loading the skins. Dry-salted skins with fatty acids are loaded into the longboat for soaking=8, with a temperature of 33 ° C. They are added to NaCl-10, stirred, then ZnCl-1.0, CH_3COOH-1.0, surfactant-1.0 in dissolved form. The duration of treatment is 10-12 hours. The rotation is continuous, starting after loading, then for 30 minutes every hour of processing.

The skins were served stacked for inspection. The operation is carried out on the M6-70 machine, which covers the entire area. If necessary, a breakdown is carried out on the spit.

The process of tanning hides is combined with the current process of additional soaking. In this case, the antiseptics zinc chloride or sodium silicofluoride are completely excluded from the process.

Glutaraldehyde is introduced as an antiseptic with tanning ability. Taking into account [1-2] that aldehydes are more reactive towards protein in an alkaline medium, in this regard, the pH of the rasterization was adjusted by Na_2CO_3.

To do this, water was collected from LC = 8 into the longboat B-2500, added to g / l: NaCl-20, C5H8O2 -3.0, Na2CO3-1.5. The duration of the

process is 8.0 hours, at a temperature of - 30 ° C, with pH = 8.0-9.0. The rotation is continuous, starting after loading, then for 30 minutes every hour of processing.

Pickling is carried out on the same equipment. The temperature is 38 °C, the duration is 48 hours.

Stay on the shelves for at least 8 hours.

Tanning-fattening on the same machine. Temperature 35 ° C, duration 6-8 hours. Consumption of chemical materials in g/l: NaCl-30,0, $Na_2S_2O_3$ 10,0, Cr_2O_3 -0,5, fat emulsion 10,0.

Water is poured into the longboat, table salt and hyposulfite are given. They are reshaped, the salt and hyposulfite content are analyzed and the skins are loaded. After 30 minutes, a chrome extract or dissolved chrome tanning agent is given. After 10 minutes, the chromium oxide content is analyzed, which should be 0.3-0.4 g / l. After 30 minutes after the addition of chromium extract, a fat emulsion is given. 4-5 hours after pouring the chrome extract, the welding temperature is checked (it should be no more than 62 ° C). If the required welding temperature is not reached, tanning is continued until the required welding temperature is reached. The rotation is continuous, starting after loading, then for 30 minutes every hour of processing. Stay on the shelves for at least 6 hours. Spin on a CF2-1170 or FMB-1202-KS centrifuge. The rest of the operation processes are carried out according to the current technology.

To conduct the study, a doodle was used after the soaking process. Samples were taken using the halves method.

As a working composition for the tanning process during the soaking process, it is proposed to use glutaraldehyde, developed in Chapter 3 (see paragraph 3.1), as follows: the composition includes in g / l: glutaraldehyde – 3.0, soda ash -1.5, surfactant-0.5, sodium chloride -10.0.

The analysis of the data presented in Table 2 shows that the doodle produced according to the proposed technology is characterized by optimal physico-mechanical and chemical properties, and the output of finished products is increased by 2-4%

LIST OF LITERATURE

1. Казаков Ф.Ф., Кадиров Т.Ж. Разработка исследование синтез и свойства модифицированной карбамид-формальдегидной смолы и технология наполнения кожи на её основе // “Илмий тадқиқот ва кадрлар тайёрлаш тизимида инновацион ҳамкорликни

ривожлантиришнинг муаммолари ва истиқболлари" мавзусида ҳалқаро илмий-амалий анжумани материаллари. Бухоро 24-25 ноябр. 2017 й. 179-181 б.
2. Казаков Ф.Ф., Кодиров Т.Ж., Жумаева Ш. Влияние модифицированного наполнителя-карбамид-формальдегидной смолы на свойства кожевой ткани каракуля // "Кожа и мех в XXI веке технология, качество, экология, образование" XI Международная научно-практическая конференция Россия, Республика Бурятия, 16-20 ноября 2015 года. С. 90-93.
3. Зурабян К.М. Справочник кожевника. (Сырье и материалы) М.:, Легкая и пищевая промышленность, 1984, С.384.
4. Химическая энциклопедия. (Под ред. И.Л.Кнунянца) М.:, Изд. Советская энциклопедия, Том 5, 1988, С.1334.
5. Каракульча // Современный толковый словарь русского языка : в 3 т. / ред.-сост. Т. Ф. Ефремова. — АСТ : Астрель : Харвест, 2006. — Т. 1 : А—Л.
6. Головтеева А.А., Куциди Д.А., Санкин. Л.Б. Лабораторный практикум по химии и технологии кожи и меха, М.:, Легпромбытиздат, 1987, С.311
7. Методы испытания хромовых кож для верха обуви. — М.: ЦНИИТЭИлегпром, 1972. - 38-48.