METHOD FOR TANNING AN ANIMAL SKIN

The present invention relates to an improved method for tanning an animal skin.

In one aspect, there is provided a method for tanning an animal skin comprising the following phases:

a) putting said animal skin in contact with a tanning bath comprising (weight percentages referring to the pelt weight of said skin):

- water,
- at least one C_2-C_8 aliphatic dialdehyde in a quantity within the range of 2%-30%,
- at least one non-ionic surfactant in a quantity within the range of 0.1% - 20%,

said tanning bath having a pH within the range of 1 - 5 and a density within the range of 3 to 10°Bé;

b) bringing the pH of the tanning bath to a pH higher than 5 and lower than or equal to 8;

c) washing said skin, obtaining a tanned animal skin.

In another aspect, there is provided tanned skin obtained using the method described herein having a mechanical strength measured according to the method ISO 3371-2:2016 within the range of 20 - 50 N.

The tanning method of the present invention can be advantageously used in field of tanning processes for the transformation of animal skins into leather.

The combination of manual, mechanical and physico-chemical operations through which animal skins are transformed into leather, is generally indicated as tanning cycle, or tanning process.

The objective of a tanning process (hereinafter tanning) is to confer irreversible stability to the

animal skin which would otherwise be subject to putrefaction. Tanning not only makes animal skin rotproof and therefore preservable with time, but it also gives the skin desirable properties, such as hydrothermal resistance, resistance to acids and alkalis, mechanical resistance and dimensional stability. These properties are obtained by reacting the collagen of the raw skin with various tanning agents so as to obtain the cross-linking of the polypeptide chains of collagen and its consequent inerting. An index of the effectiveness of the tanning process on skins is represented by the shrinkage temperature of the tanned skin.

Before being subjected to tanning, the raw skin, generally kept in salted or dried form, is subjected to a series of operations essentially aimed at eliminating the undesired parts of the skin, such as hair and fleshing, and preparing the part of interest, i.e. the derma, for receiving the tanning agents. These