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Leather — Wet blue sheep skins — Specification

Cuir — Peaux d'ovins à l'état «bleu humide» — Spécifications

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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 5432 was prepared by Technical Committee ISO/TC 120, *Leather*, Subcommittee SC 2, *Tanned leather*.

Annex A forms a normative part of this International Standard. Annex B is for information only.

Leather — Wet blue sheep skins — Specification

1 Scope

This International Standard specifies requirements, methods of sampling and test for wet blue leather produced from sheep skins tanned without wool and with the use of basic chrome sulphate as the primary tanning agent.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2418:1972, *Leather — Laboratory samples — Location and identification.*

ISO 3380:1975, *Leather — Determination of shrinkage temperature.*

ISO 4045:1977, *Leather — Determination of pH.*

IUC 8, *Determination of the chromic oxide content of leather.*

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1
cured
preserved temporarily from putrefaction until it can be tanned

NOTE Any method of curing including wet or dry salting or drying is included.

3.2
pigmentation
colouration produced by fungi grown on wet blue chrome leather

NOTE The colouration produced by fungi will normally be black, white, green or yellow but can also be pink or violet.

4 Requirements

4.1 Raw material

The wet blue sheep skins shall be processed from cured or fresh sheep skins.

4.2 Tanning

After pretanning operations, the sheep skins shall be tanned with basic chromium sulfate as the primary tanning agent. The cut cross section shall be such that the skin is completely penetrated by the bluish colour of chromium when examined visually. Chrome tanning shall be completed at a pH of 3,0 or above.

4.3 Fungicidal additives

Fungicides shall be used to inhibit mould growth in wet blue sheep skins.

NOTE 1 Fungicides used to inhibit mould growth and pigmentation in wet blue sheep skins should be effective and should not cause a health hazard. The type of fungicides used and their dosage should be as agreed upon between the purchaser and the supplier.

NOTE 2 The fungicides should be applied in an appropriate quantity to ensure storage up to 4 months at the temperature and humidity prevailing during storage or transportation. The efficacy of the fungicidal treatment may be determined using one of the references given in Annex B.

4.4 Presentation

The wet blue sheep skins have a clean flesh side and the grain side shall be free from wool. The size and grading shall be as agreed upon between the interested parties.

NOTE Wet blue sheep skins should have a tight grain and be free from creases, drum folds and stains caused by iron salts. At least 95 % of the number of pieces in a lot should be free from stains caused by chrome salts and in no piece should the aggregate of the stained area exceed 10 % of the total area of the unit.

4.5 Shrinkage temperature

The shrinkage temperature shall not be less than 95 °C, when determined by the method specified in ISO 3380.

4.6 Chemical requirements

Wet blue sheep skins shall comply with the requirements given in Table 1.

Table 1 — Chemical requirements

Characteristic	Requirement
Moisture content, %, (m/m)	As agreed between the interested parties
pH of water extract (minimum)	3,5

NOTE When determined by the method given in IUC 8, the chromic oxide content will normally be a minimum of 3,0 % of dry mass to give a minimum shrinkage temperature of 95 °C. Knowledge of the chromic oxide content will assist in determining the extent of any further rechroming.

5 Sampling

5.1 Sampling for routine testing

The number and location of samples taken for routine testing shall be as agreed between the interested parties.

5.2 Sampling in cases of dispute

The number of samples shall be as given in Table 2 and the location shall be as specified in ISO 2418.

Table 2 — Number of samples to be taken in cases of dispute

Number of skins	Number of samples
$\leqslant 100$	3
$\geqslant 101 \leqslant 300$	4
$\geqslant 301 \leqslant 500$	5
$\geqslant 501 \leqslant 700$	6
$\geqslant 701$	7

5.3 Preparation of samples

Prepare samples by wiping off excess water and by keeping wrapped in filter paper for 30 min without applying any extra pressure.

6 Methods of Test

6.1 Visual tests

Examine the wet blue sheep skins for uniformity of colour of surface, penetration of chromium, absence of wool and clean flesh side.

6.2 Shrinkage temperature

Shrinkage temperature of the wet blue sheep skins shall be determined in accordance with the method prescribed in ISO 3380.

6.3 Moisture content

Moisture content of the wet blue sheep skins shall be determined in accordance with the method prescribed in Annex A.

6.4 pH of water extract

pH of water extract of the wet blue sheep skins shall be determined in accordance with the method prescribed in ISO 4045.

6.5 Fungicidal efficacy

Fungicidal efficacy on wet blue sheep skins may be determined in accordance with one of the references given in Annex B.

7 Packing and Marking

7.1 Packing

The wet blue sheep skins shall be packed suitably as agreed to between the interested parties so as to preserve their original wet condition.

7.2 Marking

The following particulars shall be marked or labelled on each package:

a) name of the material, and the trade name or brand name, if any;

b) name and address of the manufacturer;

c) month and year of tanning;

d) number of pieces of skins;

e) other details desired by the purchaser.

Annex A
(normative)

Determination of moisture content

A.1 Apparatus

A.1.1 **Flat, shallow weighing vessels**, with ground glass stoppers or **shallow open dishes**

NOTE Small weighing vessels with ground glass stoppers allow more accurate work than open dishes.

A.1.2 **Oven,** fitted with a fan and a regulator, capable of maintaining the temperature at 102 °C ± 2 °C.

A.1.3 **Suitable desiccator**

A.1.4 **Analytical balance**

A.2 Sampling

A.2.1 Sample in accordance with clause 5.

A.3 Procedure

A.3.1 Place the sample on a non-absorbent surface and chop manually into pieces not exceeding 5 mm squares.

A.3.2 Accurately weigh about 3 g of the sample to the nearest 1 mg into a tared weighing vessel (A.1.1) and dry at 102 °C ± 2 °C for 5 h.

A.3.3 Cool the vessel and contents for 30 min in a desiccator (A.1.3) and weigh.

A.3.4 Repeat the drying, cooling and weighing but with drying time of only 1 h until either any further loss in mass does not exceed 0,003 g (that is 0,1 % of the original mass) or the total drying time equals 8 h.

A.3.5 Record the final mass of the sample and weighing vessel, and calculate the dried mass of sample.

A.4 Expression of Results

A.4.1 Calculation

The moisture content, M, expressed as percentage by mass, is determined by the following formula:

$$M = \frac{m_0 - m_1}{m_0} \times 100$$

where

m_0 is the mass in grams, of the sample before drying;

m_1 is the mass in grams, of the sample after drying.