

BS ISO 5431:2013



BSI Standards Publication

Leather — Wet blue goat skins — Specification

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National foreword

This British Standard is the UK implementation of ISO 5431:2013. It supersedes BS ISO 5431:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TCI/69, Footwear, leather and coated fabrics.

A list of organizations represented on this committee can be obtained on request to its secretary.

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**Leather — Wet blue goat skins —
Specification**

Cuir — Peaux de caprins à l'état "bleu humide" — Spécifications



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Foreword

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The committee responsible for this document is ISO/TC 120, *Leather*, Subcommittee SC 2, *Tanned leather*.

This second edition cancels and replaces the first edition (ISO 5431:1999), which has been technically revised.

Leather — Wet blue goat skins — Specification

1 Scope

This International Standard specifies requirements, methods of sampling and methods of test for wet blue leather produced from goat skins tanned without hair and with the use of basic chromium sulfate as the primary tanning agent.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2418, *Leather — Chemical, physical and mechanical and fastness tests — Sampling location*

ISO 3380, *Leather — Physical and mechanical tests — Determination of shrinkage temperature up to 100 °C*

ISO 4045, *Leather — Chemical tests — Determination of pH*

ISO 4684, *Leather — Chemical tests — Determination of volatile matter*

ISO 5398-1, *Leather — Chemical determination of chromic oxide content — Part 1: Quantification by titration*

ASTM D4576, *Standard test method for mold growth resistance of wet blue*

3 Terms and definitions

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

3.1

cured

preserved temporarily from putrefaction until it can be tanned

Note 1 to entry: Any method of curing, including wet or dry salting or drying, is included

3.2

pigmentation

colouration produced by fungi growing on wet blue chrome leather

Note 1 to entry: 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

Wet blue goat skins shall be processed from cured or fresh goat skins.

4.2 Tanning

After pretanning operations, the 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 the chromium sulfate when examined visually. Tanning shall be carried out at a pH of 3,0 or above.

4.3 Fungicidal additives

Fungicides shall be used to inhibit mould growths in the wet blue goat skins.

NOTE 1 Fungicides used to inhibit mould growth and pigmentation in wet blue goat skins should be effective and should not cause a health hazard. The types of fungicide used and their dosage should preferably be agreed between the purchaser and the supplier

NOTE 2 Fungicides should preferably be applied in quantities appropriate to ensure storage for up to 4 months at the temperature and humidity prevailing during storage or transportation.

4.4 Presentation

Wet blue goat skins shall be well fleshed, and the grain side shall be free from hair, including short hair and fine hair. The size and grading shall be as agreed between the interested parties.

NOTE The skins should preferably 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 chromium salts, and the aggregate of the stained area in any one piece should not exceed 10 % of the total area of the piece.

4.5 Shrinkage temperature

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

4.6 Chemical requirements

Wet blue goat skins shall comply with the requirements given in [Table 1](#).

Table 1 — Chemical requirements

Characteristic	Requirement
Volatile matter, %	As agreed between the interested parties
pH of water extract (minimum)	3,5

NOTE A minimum shrinkage temperature of 95 °C would normally require minimum chromic oxide content of 3,0 % relative to the dry mass, as determined by the method given by ISO 5398-1. Once the chromic oxide content has been determined in this way, it can be used to estimate how much more chromic oxide has to be added to achieve the desired level (i.e. the extent of further rechroming)

5 Sampling

5.1 Sampling for routine testing

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

5.2 Sampling in case 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
Up to 100	3
101 to 300	4
301 to 500	5
501 to 700	6
701 and over	7

5.3 Preparation of samples

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

6 Method of test

6.1 Visual tests

Examine the wet blue goat skins for uniformity of colour of the surface, penetration of chromium sulfate, absence of short hair and cleanness of the flesh side.

6.2 Shrinkage temperature

Determine the shrinkage temperature by the method specified in ISO 3380.

6.3 Volatile matter

Determine the volatile matter by the method specified in ISO 4684.

6.4 pH of the water extract

Determine the pH of the water extract by the method specified in ISO 4045.

6.5 Effectiveness of the fungicide

Determine the effectiveness of the fungicide by the method specified in ASTM D4576.

7 Packaging and Marking

7.1 Packaging

Wet blue goat skins shall be packaged suitably as agreed between the interested parties so as to preserve their original wet condition.

7.2 Marking

The following particulars shall be marked on each package or on a label attached to the package:

- a) the type of material (i.e. wet blue goat skin), and the trade name or brand name, if any;
- b) the name and address of the manufacturer;
- c) the month and year of the tanning;

- d) the number of skins;
- e) any other details desired by the purchaser.

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