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VEGETABLE TANNED BEND OUTER SOLE LEATHER - SPECIFICATION

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Leather — Vegetable tanned bend outer sole — Specification



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This African Standard was prepared by the ARSO Technical Harmonization Committee Number 7 on Leather and Textile Products (ARSO/THC 07).

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Leather — Vegetable tanned bend outer sole — Specification

1 Scope

This African Standard specifies requirements for vegetable-tanned bend outer sole leather.

2 Normative references

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

ISO 2419, *Leather — Physical and mechanical tests — Sample preparation and conditioning*

ISO 2588, *Leather — Sampling — Number of items for a gross sample*

ISO 2589, *Leather — Physical and mechanical tests — Determination of thickness*

ISO 3378, *Leather — Physical and mechanical tests — Determination of resistance to grain cracking and grain crack index*

ISO 4044, *Leather — Chemical tests — Preparation of chemical test samples*

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

ISO 4047, *Leather — Determination of sulphated total ash and sulphated water-insoluble ash*

ISO 4098, *Leather — Chemical tests — Determination of water-soluble matter, water-soluble inorganic matter and water-soluble organic matter*

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

ISO 5403-1, *Leather — Determination of water resistance of flexible leather — Part 1: Repeated linear compression (penetrometer)*

ISO 5403-2, *Leather — Determination of water resistance of flexible leather — Part 2: Repeated angular compression (Maeser)*

3 Terms and definitions

For the purpose of this standard the following definitions apply.

3.1

bend

half a bovine hide, produced by cutting along the backbone line with the belly and shoulder parts removed

4 Requirements

4.1 General requirements

4.1.1 Tannage

The leather shall be tanned through with vegetable tanning materials only and shall show no signs of raw streaks or patches.

4.1.2 Form

The leather shall be supplied in the form of well-trimmed bends.

4.1.3 Grade

The leather shall be full grain or may be slightly snuffed, provided that such snuffing shall have removed the top portions only of the hair follicles. The flesh side shall be free from adhering flesh and shall be smooth. The leather shall be free from imperfections and blemishes that affect its appearance or that may affect its serviceability (or both). Any defects present shall be such that the cutting area of the bend is not reduced by more than 6.5 dm².

4.1.4 Thickness

The nominal thickness of the leather shall be within one of the following ranges, as measured in accordance with ISO 2589:

- a) 3.5 mm – 4.9 mm;
- b) 5.0 mm – 5.9 mm; or
- c) 6.0 mm – 7.0 mm.

The actual thickness, measured in accordance with 5.3, and recorded to the nearest 0.1 mm, shall be at least 75 % of the area of a bend, fall within the relevant thickness range, and at no point in the rest of the bend shall it exceed the appropriate maximum by more than 0.5 mm or be less than the appropriate minimum by more than 0.5 mm.

4.2 Chemical requirements

When the leather is tested in accordance with

- a) Clause 5.4 the pH value shall be not lower than 3.3, except that if the pH value is between 3.3 and 3.5, the difference between the first and the second readings shall not exceed 0.7,
- b) Clause 5.5 the water-soluble matter content, calculated on a moisture-free basis, shall not exceed a mass fraction of 21 %,
- c) Clause 5.6 the volatile matter content as received (i.e. without prior conditioning) shall not exceed a mass fraction of 17 %, and
- d) Clause 5.7 the sulphated ash content of the water-soluble matter, calculated on a moisture-free basis, shall not exceed a mass fraction of 4.2 %.

4.3 Physical requirements

When the leather is tested in accordance with

- a) Clause 5.8 the grain extension shall be at least 15 %,

- b) Clause 5.9 it shall show no signs of pipiness when bent flesh side out,
- c) Clause 5.10, the compressibility shall not exceed 10 %, and
- d) Clause 5.11 the water penetration rate shall be such that the amount of water that passes through the test sample in the first 10 min after penetration has occurred shall not exceed 0.29 g/dm².

5 Methods of test

5.1 Test specimens

Take samples for both chemical and physical tests in accordance with ISO 2588.

5.2 Preparation and conditioning of test specimens

Use the procedures given in ISO 2419 and ISO 4044 as appropriate.

NOTE Conduct the physical tests without removing the test specimens from the conditioned atmosphere.

5.3 Thickness

Thickness is determined using ISO 2589.

5.4 pH value

pH value is determined using ISO 4045.

5.5 Water-soluble matter content

Water soluble matter content is determined using ISO 4098.

5.6 Volatile matter content

Volatile matter content is determined using ISO 4684.

5.7 Sulphated ash content of water soluble matter

Sulphated ash content of water soluble matter is determined using ISO 4047.

5.8 Grain extension

Use the method for measuring the resistance to grain cracking given in ISO 3378.

5.9 Freedom from pipiness

Bend the leather with the flesh side out over a number 1 mandrel, using the apparatus and procedure given in ISO 3378, and inspect for any signs of pipiness.

5.10 Compressibility

Compressibility is determined using ISO 5403-2.

5.11 Water penetration rate

Water penetration rate is determined using ISO 5403-1.

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