
**Leather — Leather for Alum tanned wet
white crust — Specification**

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Foreword

This Ethiopian Standard has been prepared under the direction of Technical Committee for Leather and Leather Products(TC 74) and published by the Ethiopian Standards Agency (ESA).

Draft of the standard has been presented by Ethiopian Leather Industry Development Institute.

Acknowledgment has been made for the organization for its concern to contribute to the effort of national standardization.

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1 Scope

This Ethiopian standard specifies to alum tanned (tawed) wet white crust 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.

ES ISO 105-B02, Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test

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

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

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

ES ISO 337 6, Leather — Physical and mechanical tests — Determination of tensile strength and percentage extension

ES ISO 3377-2, Leather — Physical and mechanical tests — Determination of tear load — Part 2: Double edge tear

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

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

ES ISO 4045, Leather — Chemical tests — Determination of PH

ES ISO 17226-1, Leather — chemical determination of formaldehyde content — part 1: method using high-performance liquid chromatography

ES ISO 17075-1, leather — chemical determination of chromium(vi) content in leather — part 1: colorimetric method

ES ISO 17075-2, Leather — chemical determination of chromium(vi) content in leather — part 2: chromatographic method

ES ISO 17070, leather — chemical tests — determination of tetrachlorophenol-, trichlorophenol-, dichlorophenol-, monochlorophenol-isomers and pentachlorophenol content

3 Terms and definitions

For the purposes of this document, the following terms and definitions ES 1180 shall apply.

3.1

alum tanned leather/tawed leather

leather prepared solely with a mixture of which the essential active ingredient is an aluminum salt, and often, but not necessarily, alum-egg yolk and flour

NOTE The natural colour of the leather is white.

4 Requirements

Leather for alum tanned (tawed) wet white crust shall conform to the requirements given in Table 1.

Table 1 — Requirements for leather for alum tanned (tawed) wet white crust

Characteristics	Requirements	Test method
PH of aqueous extract, min different figure(If the pH value is below 4),max	3.5 0.7.	ES ISO 4045
Shrinkage temperature, min	70°C	ES ISO 3380 ^a
Tear strength	15.0 N	ES ISO 3377-2 ^a
Elongation at break , in %,min	50	ESISO 3376a
Tensile strength, N/mm ² ,min	10	
Ash content,	MAX.8%	ES ISO 4047
Tanning Oxide(Al ₂ O ₃),min	2%(Al ₂ O ₃)	
Formaldehyde	300 mg/kg	ES ISO 17226-1
Fat content	10-18%	
Hexavalent chromium	3mg/kg	ES ISO 17075
Azo colorant	<30mg/kg	ES ISO 17070
PCP	<5mg/kg	ES ISO 17234-1 ES ISO 17234-2

a An alternative, but not equivalent, tropical standard atmosphere of 27 °C/65 % RH may be used if the parties involved agree on its use. In case of dispute, the reference standard atmosphere as prescribed in ES ISO 2419 shall be used.

5 Sampling

5.1 When possible, the location and identification of laboratory samples shall be in accordance with ES ISO 2418.

5.2 The number of samples shall be by agreement between the interested parties, except in cases of dispute when the number of samples shall be in accordance with ES ISO 2588. If the lot size of the leathers is high, the maximum number of samples shall be five.

6 Sample preparation and conditioning

6.1 Samples for physical and fastness tests shall be prepared and conditioned in accordance with ES ISO 2419.

6.2 Samples for chemical analysis shall be prepared in accordance with ES ISO 4044.

7 Test report

The test report shall contain at least the following information:

- a) reference to this International Standard;
- b) results of the tests listed in Table 1;
- c) date and place of tests;
- d) conditioning and test atmospheres used for physical testing;
- e) full details for the identification of samples;
- f) any deviations from this International Standard or the test procedures used.

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- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

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