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Leather — Tests for colour fastness — Colour fastness to migration into polymeric material

Cuir — Essais de solidité des coloris — Solidité des coloris à la migration dans les matériaux polymères

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

IULTCS, originally formed in 1897, is a world-wide organization of professional leather societies to further the advancement of leather science and technology. IULTCS has three Commissions, which are responsible for establishing international methods for the sampling and testing of leather. ISO recognizes IULTCS as an international standardizing body for the preparation of test methods for leather.

This document was prepared by the Fastness Tests Commission of the International Union of Leather Technologists and Chemists Societies (IUF Commission, IULTCS) in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 289, *Leather*, the secretariat of which is held by UNI, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

It is based on IUF 442 published in *J. Soc. Leather Tech. Chem.*, **56**, pp. 395–400, 1972, with a minor amendment in **65**, p. 128, 1981, declared an official method of the IULTCS in 1973 and reconfirmed in 1989.

This third edition cancels and replaces the second edition (ISO 15701:2015), which has been technically revised.

The main changes are as follows:

— to indicate the method is applicable for polymeric materials, the general references in the text to “plasticized poly(vinyl chloride)” have been changed to “polymeric material”;

— the note previously at the end of the Scope has been deleted;

— Clause 3 has been added;

— 5.1 has been revised to allow the use of plates of an inert material in the test apparatus.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Leather — Tests for colour fastness — Colour fastness to migration into polymeric material

1 Scope

This document specifies a method for assessing the propensity of dyes and pigments to migrate from leather to a synthetic substrate by determining the transfer of colour from the leather to white polymeric material in contact with it.

This method is applicable to leather of all kinds at any stage of processing.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 105-A03, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining*

ISO 105-A04, *Textiles — Tests for colour fastness — Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics*

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

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

The side under test of the leather specimen is placed on a polymeric sheet, for example a white-pigmented sheet of plasticized poly(vinyl chloride), and the resultant composite specimen is exposed to heat under pressure in a suitable apparatus. The transfer of colour from the leather to the white sheet is assessed with the standard grey scale for assessing staining and, if applicable, any change in hue of the staining is also assessed.

The use of standard sheets of polymeric material makes it possible to determine the tendency of colour to migrate from the leather to synthetic materials used in conjunction with the leather.

If the leather has a finish, the test may be carried out with the finish intact or broken.

The general colour fastness testing principles used are in accordance with those described in ISO 105-A01, taking into account the differences between textile substrates and leather.

5 Apparatus and materials

The usual laboratory apparatus and, in particular, the following shall be used.

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