



Newsleather

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Edition 7, 2025

Welcome

This is the seventh edition of our scientific newsletter, dedicated to providing the latest updates on research, regulatory developments, technology, and standard methods in the leather industry.

This newsletter is available in English, Spanish, and Portuguese. On today's Newsleather the methods will be in English as they are technical terms.

This issue includes an update on the ISO/EN Official Leather Test Methods, and the methods developed by IULTCS that are not considered official standards. Dr. Giancarlo Lovato, the IULTCS ISO Committee Manager, explains how the Test Commissions function and how IULTCS, ISO, and CEN collaborate to create new standards for the leather industry.

We thank Dr. Lovato for his contribution to IULTCS and the leather industry.

Please share your comments and suggestions to secretary@iultcs.org

Kind regards,

Dr. Luis A. Zugno, editor



To advance and maintain analytical methods in line with technical progress, the IU Test Commissions were formed. These include the IUC (International Union Chemical Test Methods), IUP (International Union Physical Test Methods), and IUF (International Union Fastness Test Methods).

The IULTCS, through its IU Testing Commissions, supports the leather tanning industry globally by developing and publishing test methods specifically relevant to leather manufacture and usage. The IU Commissions' development of these test methods helps ensure that the leather industry does not have to meet performance standards of other materials that do not reflect the realities of working with leather.

Following agreements in 1990 and re-affirmed in 2005, the ISO (International Organization for Standardization) recognizes IULTCS as an International Standardizing Body.

ISO has assigned the responsibility for the development of leather test methods to IULTCS, and the resultant test method documents are published as joint IULTCS and ISO Standards.

An IULTCS ISO Committee Manager was established to coordinate the IU Testing Commissions' activities with ISO.

Since 2005, ISO has published all new joint IULTCS and ISO Standards. Many ISO member countries use these standards to form their own national standards.

The European Committee for Standardization (CEN), through the CEN/TC 289 Technical Committee "Leather", has adopted many IU/ISO Standards. The IU Commissions and the CEN/TC 289 Working Groups coordinate their efforts by holding joint technical meetings. This collaboration enables the publication of identical leather test methods for IULTCS, ISO, and EN Standards.

Below you will find the updated list of IULTCS methods (also available at the IULTCS website). The list has the IUC, IUF and IUP Test Methods classified as follows:

- 1) IUC, IUF and IUP Test Methods that are ISO and EN Standards. These methods can be purchased at: <https://www.iso.org/store.html>

2) IUC, IUF and IUP Test Methods that are only IULTCS Standards (in red color). They are available free at the IULTCS website: <https://iultcs.org/iuc-iuf-iup-leather-test-methods-commissions/>

For inquiries or comments regarding leather test methods, please reach out to the IULTCS ISO Committee Manager.

Dr. Giancarlo Lovato
IULTCS ISO Committee Manager
E-mail: office@iultcs.org

Legend for the Test Methods as of April 2025:

- * The standards are available, but they are currently undergoing revision, and an update is in preparation
- ** The standards are new and currently undergoing development
- *** The standards are the nearest textile to International Standard, recommended for use as the International Standard for Leather.

DIS (Draft International Standard) or FDIS (Final Draft International Standard) are in preparation and will be published shortly. These draft Standards can be obtained from your national Standards Organization but are not yet officially approved ISO Standards.

IULTCS - Chemical Test Methods for Leather

IUC Test method	Method name	ISO Standard	EN Standard
IUC 1 (1965)	General comments	-	-
IUC 2 (2023)	Position and preparation of specimens for testing (same as IUP 2)	ISO 2418:2023	EN ISO 2418
IUC 3 (2017)	Preparation of chemical test samples	ISO 4044:2017	EN ISO 4044
IUC 4 (2018)	Determination of matter soluble in dichloromethane and free fatty acid content	ISO 4048:2018	EN ISO 4048
IUC 5 (2005)	Determination of volatile matter	ISO 4684:2005	EN ISO 4684
IUC 6 (2018)	Determination of water-soluble matter, water soluble inorganic matter and water-soluble organic matter	ISO 4098:2018	EN ISO 4098
IUC 7 (1977)	Determination of sulphated total ash and sulphated water insoluble ash	ISO 4047:1977	EN ISO 4047
IUC 8 (2018)	Determination of chromic oxide content Part 1: Quantification by titration	ISO 5398-1:2018	EN ISO 5398-1
IUC 8-2 (2009)	Determination of chromic oxide content Part 2: Quantification by colorimetric determination	ISO 5398-2:2009	EN ISO 5398-2
IUC 8-3 (2018)	Determination of chromic oxide content Part 3: Quantification by atomic absorption spectrometry	ISO 5398-3:2018	EN ISO 5398-3
IUC 8-4 (2018)	Determination of chromic oxide content Part 4: Quantification by inductively coupled plasma(ICP-OES)	ISO 5398-4:2018	EN ISO 5398-4
IUC 9 (1984)	Determination of water-soluble magnesium salts	-	-
IUC 10 (1984)	Determination of nitrogen and hide substance	ISO 5397:1984	-
IUC 11 (2018)	Determination of pH and difference figure	ISO 4045:2018	EN ISO 4045
IUC 13 (1975)	Determination of zirconium	-	-
IUC 15 (1973)	Determination of phosphorus	-	-
IUC 16 (1969)	Determination of aluminum	-	-
IUC 17 (1980)	Determination of hydroxyproline in materials containing collagen	-	-
* IUC 18-1 (2017)	Determination of hexavalent chromium content – Part 1; Colorimetric method	* ISO 17075-1:2017	* EN ISO 17075-1
* IUC 18-2 (2017)	Determination of hexavalent chromium content – Part 2; Ion chromatographic method	* ISO 17075-2:2017	* EN ISO 17075-2
IUC 19-1 (2021)	Determination of formaldehyde content in leather Part 1: Quantification by HPLC	ISO 17226-1:2021	EN ISO 17226-1
IUC 19-2 (2018)	Determination of formaldehyde content in leather Part 2: Quantification by colorimetric analysis	ISO 17226-2:2018	EN ISO 17226-2
IUC 19-3 (2011)	Determination of formaldehyde content in leather Part 3: Formaldehyde emissions from leather	ISO 17226-3:2011	EN ISO 17226-3
IUC 20-1 (2024)	Chemical tests for the determination of certain azo colorants in dyed leathers Part 1: Determination of certain aromatic amines derived from azo colorants	ISO 17234-1:2024	EN ISO 17234-1
IUC 20-2 (2011)	Chemical tests for the determination of certain azo colorants in dyed leathers Part 2: Determination of 4-aminoazobenzene derived from azo colorants	ISO 17234-2:2011	EN ISO 17234-2

The IULTCS official methods of analysis for leather (IUC, IUP and IUF), including the equivalent ISO and EN Standards

IUC 21 (2003) (now included in IUC 20-1)	Method for the detection of certain azo colorants in dyestuff mixtures. <i>(Method Annexed in the new revision IUC 20-1, ISO 17234-1:2024)</i>	-	-
IUC 22 (2003)	Determination of aluminium oxide content of aluminium tanning agents	-	-
IUC 24 (2003)	Determination of basicity of aluminium tanning agents.	-	-
* IUC 25 (2015)	Determination of tetra chlorophenol-, trichlorophenol-, dichlorophenol-, mono chlorophenol-isomers and pentachlorophenol content	*ISO 17070:2015	*EN ISO 17070
IUC 26 (2021)	Determination of free-formaldehyde content in leatherprocessing chemicals	ISO 27587:2021	EN ISO 27587
* IUC 27-1 (2019)	Chemical determination of metal content. – Part 1: Extractable metals	*ISO 17072-1:2019	*EN ISO 17072-1
IUC 27-2 (2022)	Chemical determination of metal content. – Part 2: Total metal content	ISO 17072-2:2022	EN ISO 17072-2
IUC 28-1 (2023)	Determination of ethoxylated alkylphenols in leatherPart 1: Direct method	ISO 18218-1:2023	EN ISO 18218-1
IUC 28-2 (2019)	Determination of ethoxylated alkylphenols in leatherPart 2: Indirect method	ISO 18218-2:2019	EN ISO 18218-2
IUC 29-1 (2020)	Determination of preservative content (TCMTB-OPP-CMK-OIT) in leather – Part 1; Acetonitrile extractionmethod	ISO 13365-1:2020	EN ISO 13365-1
IUC 29-2 (2020)	Determination of preservative content (TCMTB-OPP-CMK-OIT) in leather– Part 2: Artificial perspirationextraction method	ISO 13365-2:2020	EN ISO 13365-2
IUC 30-1 (2021)	Leather - Chemical determination of chlorinated hydrocarbons in leather – Part 1: Chromatographic method for short chain chlorinated paraffins (SCCP)	ISO 18219-1:2021	EN ISO 18219-1
IUC 30-2 (2021)	Leather - Chemical determination of chlorinated hydrocarbons in leather – Part 2: Chromatographic method for middle chain chlorinated paraffins (MCCP)	ISO 18219-2:2021	EN ISO 18219-2
IUC 32 (2020)	Quantitative analysis of tanning agents by filter method	ISO 14088:2020	EN ISO 14088
IUC 33 (2013)	Leather - Determination of tan content of synthetictanning agents	ISO 17489:2013	EN ISO 17489
IUC 34 (2016)	Leather - Determination of N-methyl pyrrolidone inleather	ISO 19070:2016	EN ISO 19070
IUC 35 (2016)	Leather - Determination of Cr(VI) and its reductivepotential in leather chemicals	ISO 19071:2016	EN ISO 19071
IUC 36 (2023)	Leather - Guidelines for testing critical chemicals in leather	ISO 20137:2023	EN ISO 20137
IUC 37 (2020)	Leather - Determination of degradability by micro-organisms	ISO 20136:2020	EN ISO 20136
IUC 38 (2019)	Leather - Determination of pesticide residues content in leather	ISO 22517:2019	EN ISO 22517
IUC 39-1 (2023)	Leather - Per- and polyfluoroalkyl substances — Part 1: Determination of non-volatile compounds by extraction method using liquid chromatography	ISO 23702-1:2023	EN ISO 23702-1
** IUC 40 (2024)	Leather – Chemical analysis – Determination of glutaraldehyde content	**ISO/DIS 25202:2024	**prEN ISO/DIS 25202
IUC 41 (2018)	Leather - Determination of hexavalent chromium content – Pre-ageing for chemical determination ofhexavalent chromium	ISO 10195:2018	EN ISO 10195
IUC 42 (2023)	Leather – Determination of total content of certainbisphenols	ISO 11936:2023	EN ISO 11936
-	Determination of total silicon content – Reducedmolybdsilicate spectrometric method	ISO 5400:1984	-
-	Determination of organotin compounds in leather byGC/MS method (Project transferred to ISO/TC 216 Footwear)	ISO/TS 16179:2012 (Footwear method)	CEN ISO/TS 16179

IULTCS - Chemical Test Methods for Leather Chemicals			
IUC Test Method	Method name	ISO Standard	EN Standard
IUC 442 (2024)	Chemicals for the leather tanning industry – Determination of total content of certain bisphenols	ISO 21135:2024	EN ISO 21135
**IUC 443 (2025)	Chemicals for the leather tanning industry – Determination of melamine	**ISO/AWI 25172:2025	**EN ISO/AWI 25172
IUC 444 (2025)	Chemicals for the leather tanning industry – Determination of cyclosiloxanes	ISO 23649:2025	EN ISO 23649

If an IULTCS test method exists for leather (e.g. IUC xx), then the leather chemical test method number has the format 4xx.

IULTCS – Physical Test Methods for Leather			
IUP Test method	Method name <i>(Sample preparation IUP 1 included in the new IUP 2:2023)</i>	ISO Standard	EN Standard
IUP 1 (now included in IUP 2)	Sample preparation (<i>Sample preparation IUP 1 included in the new IUP 2:2023</i>)	-	-
IUP 2 (2023)	Position and preparation of specimens for testing (<i>same as IUC 2</i>)	ISO 2418:2023	EN ISO 2418
IUP 3 (2024)	Specimen and test piece conditioning	ISO 2419:2024	EN ISO 2419
IUP 4 (2016)	Measurement of thickness	ISO 2589:2016	EN ISO 2589
IUP 5 (2017)	Measurement of apparent density	ISO 2420:2017	EN ISO 2420
IUP 6 (2020)	Measurement of tensile strength and percentage elongation	ISO 3376:2020	EN ISO 3376
*IUP 7 (2016)	Measurement of static absorption of water	*ISO 2417:2016	*EN ISO 2417
*IUP 8 (2016)	Measurement of tear load – Double edge tear	*ISO 3377-2:2016	*EN ISO 3377-2
IUP 9 (2024)	Measurement of distension and strength of grain by theball burst test	ISO 3379:2024	EN ISO 3379
*IUP 10-1 (2011)	Water resistance of flexible leather. Part 1: Linear compression method (Penetrometer)	*ISO 5403-1:2011	*EN ISO 5403-1
*IUP 10-2 (2011)	Water resistance of flexible leather. Part 2: Angular compression method (Maeser)	*ISO 5403-2:2011	*EN ISO 5403-2
IUP 11 (2011)	Measurement of water resistance of heavy leather	ISO 5404:2011	EN ISO 5404
IUP 12 (2002)	Measurement of resistance to grain cracking and thegrain crack index	ISO 3378:2002	EN ISO 3378
IUP 13 (1961)	Measurement of two-dimensional extension	-	-
IUP 14 (1960)	Measurement of waterproofness of gloving leathers	-	-
IUP 15 (2023)	Determination of water vapor permeability	ISO 14268:2023	EN ISO 14268
IUP 16 (2015)	Measurement of shrinkage temperature up to 100 °C	ISO 3380:2015	EN ISO 3380
IUP 17 (1966)	Assessment of the resistance of air-dry insole leathers toheat	-	-
IUP 18 (1969)	Resistance of air-dry lining leathers to heat	-	-
IUP 19 (1969)	Resistance of air-dry upper leather to heat	-	-
IUP 20 (2022)	Determination of flex resistance. Part 1: Flexometermethod	ISO 5402-1:2022	EN ISO 5402-1
IUP 21 (1963)	Measurement of set in lasting	-	-
IUP 22 (1963)	Assessment of scuff damage by using the viewing box	-	-
IUP 23 (1963)	Measurement of scuff damage	-	-
IUP 24 (1964)	Measurement of surface shrinkage by immersion inboiling water	-	-
IUP 26 (1993)	Measurement of resistance to abrasion of heavy leather	-	-
IUP 28 (1969)	Measurement of the resistance to bending of heavy leather	-	-
IUP 29 (2017)	Measurement of cold crack temperature of surfacecoatings	ISO 17233:2017	EN ISO 17233
IUP 30 (1983)	Measurement of water vapor absorption and desorption (See IUP 42)	-	-
IUP 32 (2014)	Measurement of area	ISO 11646:2014	EN ISO 11646
IUP 35 (2002)	Determination of the dimensional stability of leather (Old title: Measurement of dry heat resistance of leather)	ISO 17227:2002	EN ISO 17227
IUP 36 (2015)	Measurement of leather softness	ISO 17235:2015	EN ISO 17235
IUP 37 (2017)	Measurement of water repellency of garment leather	ISO 17231:2017	EN ISO 17231
*IUP 38 (2017)	Measurement of heat resistance of patent leather	*ISO 17232:2017	*EN ISO 17232
IUP 39-2 (2015)	Determination of flex resistance. Part 2: Vamp flexmethod	ISO 5402-2:2015	EN ISO 5402-2
IUP 40-1 (2011)	Measurement of tear load – Single edge tear	ISO 3377-1:2011	EN ISO 3377-1

IUP 41 (2011)	Measurement of surface coating thickness	ISO 17186:2011	EN ISO 17186
IUP 42 (2016)	Measurement of water vapor absorption	ISO 17229:2016	EN ISO 17229
* IUP 43 (2016)	Measurement of extension set	* ISO 17236:2016	* EN ISO 17236
IUP 44 (2019)	Measurement of stitch tear resistance	ISO 23910:2019	EN ISO 23910
IUP 45 (2006)	Measurement of water penetration pressure	ISO 17230:2006	EN ISO 17230
IUP 46 (2006)	Measurement of fogging characteristics	ISO 17071:2006	EN ISO 17071
IUP 47 (2006)	Measurement of resistance to horizontal spread of flame	ISO 17074:2006	EN ISO 17074
IUP 48-1 (2020)	Measurement of abrasion resistance. Part 1: Tabermethod	ISO 17076-1:2020	EN ISO 17076-1
IUP 48-2 (2011)	Measurement of abrasion resistance. Part 2: Martindaleball plate method	ISO 17076-2:2011	EN ISO 17076-2
IUP 49	Measurement of bagginess, creep and relaxation	-	CEN/TS 14689:2006
IUP 50	<i>Free (original document changed to IUP 53-2)</i>	-	-
IUP 51 (Draft: 2002)	Measurement of Surface Friction	-	-
IUP 52 (Draft: 2002)	Measurement of Compressibility	-	-
* IUP 53-1 (2019)	Determination of soiling. Part 1: Martindale method	* ISO 26082-1:2019	* EN ISO 26082-1
IUP 53-2 (2012)	Determination of soiling. Part 2: Tumbling method	ISO 26082-2:2012	EN ISO 26082-2
IUP 54 (2022)	Determination of flexural properties	ISO 14087:2022	EN ISO 14087
IUP 55 (2021)	Determination of dimensional change	ISO 17130:2021	EN ISO 17130
IUP 56 (2020)	Identification of leather with microscopy	ISO 17131:2020	EN ISO 17131
IUP 57 (2015)	Determination of water absorption by capillary action(wicking)	ISO 19074:2015	EN ISO 19074
IUP 58 (2023)	Measurement of leather surface – Electronic techniques	ISO 19076:2023	EN ISO 19076

IULTCS – Fastness Test Methods for Leather (including other test methods)			
IUF Test method	Method name	ISO Standard	EN Standard
IUF 105 (1966)	Numbering code for fastness tests	-	-
IUF 110 (2014)	Leather – Sampling – Number of items for a gross sample	ISO 2588:2014	EN ISO 2588
IUF 120 (2022)	General principles of color fastness testing of leather	ISO 7906:2022	EN ISO 7906
IUF 131 (1966)	Grey scale for assessing change in color	***ISO 105-A02:1993	***EN ISO 105-A02
IUF 132 (1966)	Grey scale for assessing staining	***ISO 105-A03:2019	***EN ISO 105-A03
IUF 151 (1975)	Preparation of storable standard chrome grain leather for dyeing	-	-
IUF 201 (1966)	Approximate determination of the solubility of leather dyes	-	-
IUF 202 (1966)	Fastness to acid of dye solutions	-	-
IUF 203 (1966)	Stability to acid of dye solutions	-	-
IUF 205 (1972)	Stability to hardness of dye solutions	-	-
IUF 401 (1972)	Color fastness of leather to light: Daylight	***ISO 105-B01:2014	***EN ISO 105-B01
IUF 402 (1975)	Color fastness of leather to light: Xenon lamp	***ISO 105-B02:2014	***EN ISO 105-B02
*IUF 412 (2015)	Change of color with accelerated ageing.	*ISO 17228:2015	*EN ISO 17228
IUF 420 (1998)	Color fastness to water spotting	ISO 15700:1998	EN ISO 15700
*IUF 421 (2012)	Color fastness to water	*ISO 11642:2012	*EN ISO 11642
**IUF 422 (2024)	Color fastness to sea water	**ISO/DIS 25089:2024	**prEN ISO/DIS 25089
IUF 423 (1998)	Color fastness to mild washing	ISO 15703:1998	EN ISO 15703
*IUF 426 (2012)	Color fastness to perspiration	*ISO 11641:2012	*EN ISO 11641
IUF 427 (2024)	Color fastness to saliva	ISO 20701:2024	EN ISO 20701
**IUF 428 (2024)	Color fastness to hydroalcoholic mixtures	**ISO/DIS 7979:2024	**prEN ISO/DIS 7979
IUF 434 (2009)	Color fastness of small samples to solvents	ISO 11643:2009	EN ISO 11643
IUF 435 (1998)	Color fastness to machine washing	ISO 15702:1998	EN ISO 15702
IUF 441 (1972)	Color fastness in respect of staining raw crepe rubber	-	-
IUF 442 (2022)	Color fastness to migration into polymeric materials	ISO 15701:2022	EN ISO 15701
IUF 450 (2018)	Color fastness to cycles of to-and-fro rubbing	ISO 11640:2018	EN ISO 11640
IUF 452 (2024)	Color fastness to crocking	ISO 20433:2024	EN ISO 20433
IUF 454 (1975)	Fastness to buffing of dyed leather	-	-
IUF 458 (1984)	Color fastness of leather to ironing	-	-
IUF 470 (2022)	Leather – Test for adhesion of finish	ISO 11644:2022	EN ISO 11644
IUF 472 (2013)	Leather – Determination of surface reflection	ISO 17502:2013	EN ISO 17502
*IUF 474 (2019)	Leather – Measuring color and color difference of finished leather	*ISO 22700:2019	*EN ISO 22700

The following textile fastness Standards do not have equivalent IU leather test methods but are recommended for use as the International Standard for leather.

-	Instrumental assessment of the degree of staining of adjacent fabrics	ISO 105-A04:1989	EN ISO 105-A04
-	Instrumental assessment for change in color for grey scale	ISO 105-A05:1996	EN ISO 105-A05
-	Color fastness & ageing to artificial light at high temperatures: Xenon	ISO 105-B06:2020	EN ISO 105-B06
-	Oil repellency – Hydrocarbon resistance test	ISO 14419:2010	EN ISO 14419



Se estableció un Administrador de Comité ISO de IULTCS para coordinar las actividades de las Comisiones de Pruebas de IU con ISO. Desde 2005, ISO ha publicado todos los nuevos estándares conjuntos de IULTCS y ISO. Muchos países miembros de ISO utilizan estos estándares para formar sus propios estándares nacionales. El Comité Europeo de Normalización (CEN), a través del Comité Técnico CEN/TC 289 "Cuero", ha adoptado muchos estándares de IU/ISO. Las Comisiones de IU y los Grupos de Trabajo de CEN/TC 289 coordinan sus esfuerzos mediante la celebración de reuniones técnicas conjuntas. Esta colaboración permite la publicación de métodos de prueba de cuero idénticos para los estándares de IULTCS, ISO y EN. A continuación, encontrará la lista actualizada de métodos de IULTCS (también disponible en el sitio web de IULTCS). La lista tiene los métodos de prueba IUC, IUF y IUP clasificados de la siguiente manera:

Métodos de prueba IUC, IUF y IUP que son estándares ISO y EN. Estos métodos se pueden comprar en: <https://www.iso.org/store.html>

Métodos de prueba IUC, IUF y IUP que son solo estándares de IULTCS (**en color rojo**). Están disponibles gratuitamente en el sitio web de IULTCS:
<https://iultcs.org/iuc-iuf-iup-leather-test-methods-commissions/>

Para preguntas o comentarios sobre métodos de prueba de cuero, comuníquese con el Administrador del Comité ISO de IULTCS.

Dr. Giancarlo Lovato

Administrador del Comité ISO de IULTCS

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As Comissões de Testes IU foram formadas para avançar e manter os métodos analíticos em linha com o progresso técnico. Estas comissões incluem a IUC (Métodos de Testes Químicos da União Internacional), IUP (Métodos de Testes Físicos da União Internacional) e IUF (Métodos de Testes de Resistência da União Internacional).

A IULTCS, por meio de suas Comissões de Testes IU, apoia a indústria de curtimento globalmente, desenvolvendo e publicando métodos de teste

especificamente relevantes para a fabricação e uso de couro. O desenvolvimento desses métodos pelas Comissões IU ajuda a garantir que a indústria do couro não precise atender aos padrões de desempenho de outros materiais que não refletem as realidades de trabalhar com couro.

Seguindo os acordos de 1990 e reafirmado em 2005, a ISO (Organização Internacional de Normalização) reconhece a IULTCS como um Órgão Internacional de Normalização.

A ISO atribuiu a responsabilidade pelo desenvolvimento de métodos de teste de couro à IULTCS, e os documentos resultantes dos métodos de teste são publicados como Normas conjuntas da IULTCS e ISO.

Um Gerente de Comitê ISO da IULTCS foi estabelecido para coordenar as atividades das Comissões de Testes IU com a ISO.

Desde 2005, a ISO tem publicado todas as novas Normas conjuntas da IULTCS e ISO. Muitos países membros da ISO usam essas normas para formar seus próprios padrões nacionais.

O Comitê Europeu de Normalização (CEN), por meio do Comitê Técnico CEN/TC 289 "Couro", adotou muitas Normas IU/ISO. As Comissões IU e os Grupos de Trabalho do CEN/TC 289 coordenam seus esforços realizando reuniões técnicas conjuntas. Esta colaboração permite a publicação de métodos de teste de couro idênticos para Normas IULTCS, ISO e EN.

Abaixo você encontrará a lista atualizada dos métodos IULTCS (também disponível no site da IULTCS). A lista possui os Métodos de Teste IUC, IUF e IUP classificados da seguinte forma:

Métodos de Teste IUC, IUF e IUP que são Normas ISO e EN. Estes métodos podem ser adquiridos em: <https://www.iso.org/store.html>

Métodos de Teste IUC, IUF e IUP que são apenas Normas IULTCS (**em vermelho**). Eles estão disponíveis gratuitamente no site da IULTCS: <https://iultcs.org/iuc-iuf-iup-leather-test-methods-commissions/>

Para perguntas ou comentários sobre métodos de teste de couro, entre em contato com o Gerente do Comitê ISO da IULTCS.

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