



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39373-2020

Leather - Tests for colour fastness - Colour fastness to solvents

Issued on: November 19, 2020

Implemented on: June 1, 2021

Issued by: SAMR; SAC

Table of Contents

Foreword	3
1 Scope	5
2 Normative References	5
3 Principle	5
4 Apparatus and Materials	6
5 Sampling and Preparation of Specimen	7
6 Test Procedures	7
7 Representation of Results	8
8 Test Report	8
Appendix A (Informative) Clause Comparison between this Standard and ISO 11643:2009	10
Appendix B (Informative) Technical Differences and the Causes between this Standard and ISO 11643:2009	11
Appendix C (Informative) Method for Preparing Dry-Cleaning Solution Containing Surfactant	13

1 Scope

This Standard specifies the test method for the colour fastness of leather to solvents.

This Standard is applicable to the determination of the colour fastness of unused and unwashed leather to solvents.

This Standard is neither applicable to leather composite materials and finished leather garments, nor does it apply to the evaluation of the dry-cleaning effect of leather garments.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) is applicable to this document.

GB/T 250 Textiles - Tests for Colour Fastness - Grey Scale for Assessing Change in Colour (GB/T 250-2008, ISO 105-A02:1993, IDT)

GB/T 251 Textiles - Tests for Colour Fastness - Grey Scale for Assessing Staining (GB/T 251-2008, ISO 105-A03:1993, IDT)

GB/T 7568.7 Textiles - Tests for Colour Fastness - Standard Adjacent Fabrics -Part 7: Multifibre (GB/T 7568.7-2008, ISO 105-F10:1989, MOD)

GB/T 39364 Leather - Chemical, Physical, Mechanical and Fastness Tests -Sampling Location (GB/T 39364-2020, ISO 2418:2017, MOD)

3 Principle

The leather specimen is attached to the lining fabric, agitated in a solvent, and then remove the solvent by squeezing. After drying, the colour change of the specimen and the staining of the lining fabric are evaluated by a grey scale.

petroleum solvents. If tetrachloroethylene does not affect the colour of the specimen, neither petroleum solvents shall affect it, but the reverse is not necessarily true.

4.6 Triglyceride (cis-9-octadecanoic acid ethyl ester) (also known as glyceryl trioleate), industrial grade.

NOTE: The stock solution is stored in the refrigerator at 0°C~4°C, and the validity period is 1 month; the working solution is stored in the refrigerator at 0°C~4°C, and the validity period is 2 weeks.

4.7 Gray scale, including the following two types:

- Gray scale for evaluating discoloration, which shall comply with the provisions of GB/T 250;
- Gray scale for staining evaluation, which shall comply with the provisions of GB/T 251.

5.1 Sampling

It shall be performed according to the provisions of GB/T 39364.

5.2 Preparation of specimen

Cut a 40mmx100mm leather specimen. Fit it with a piece of about 40mmx100mm multi-fibre lining fabric (4.4), so that the flesh side (or non-wearing side) of the leather specimen is attached to the fabric. Then the formed and combined specimen is stapled at one end of the specimen, or the combined specimen may be stitched along one end of the specimen.

6.1 Solvent ratio

The solvent ratio shall comply with the provisions of Table 1.

6.2.1 Put the combined sample, (100+/-5) mL of solvent (6.1) and 20 PTFE rotors

(4.3)

into the container (4.2), and place it in the stirring device (4.1) at the speed (40+/-5) r/min and temperature at (30+/-2) °C to stir for 30min.

NOTE: If necessary, before adding the specimen, it can be preheated to about 30°C by setting the temperature control device in the stirring device.

6.2.2 Take out the combined specimen; sandwich it between two absorbent papers; and place a 4.5kg weight block (4.8) on the absorbent paper and squeeze it evenly for 1min. Separate the specimen and the lining fabric; and place them in a fume hood respectively. And volatilize at room temperature to remove the residual solvent.

6.2.3 Using the untested leather specimen and the multi-fibre lining fabric (4.4) as

references, the grey scale (4.7) is used to evaluate the discoloration of the specimen and the staining of the lining fabric.

NOTE: After drying, the transparent tape may be used to carefully remove the fibres or loose materials adhered to the lining fabric.

7 Representation of Results

The colour fastness to solvent of the specimen is expressed by the colour change grade of the specimen and the staining grade of the lining fabric. If necessary, any changes on the coating surface of the specimen may be recorded.

8 Test Report

The test report shall include the following:

a) Number of this Standard;