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## Leather — Chemical tests — Determination of chromium (VI) and the reductive potential for chromium tanning agents

*Cuir — Essais chimiques — Détermination de la teneur en chrome (VI) et du potentiel de réduction des agents de tannage au chrome* 



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Page

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### Contents

Forew	/ord	iv
Introd	luction	<b>v</b>
1	Scope	. 1
2	Normative references	1
3	Principle	. 1
4	Reagents	. 1
5	Apparatus	2
6	Sampling and sample preparation	2
7	Determination of chromium (VI) content using the standard addition procedure	2
	7.1 General	2
	<ul><li>7.1 General</li></ul>	2
8	Quality control	3
9	Calculation and expression of the results	3
10	Test report	5
Biblio	graphy	. 6

#### Foreword

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ISO 19071 was prepared by the Chemical Testing Commission of the International Union of Leather Technologists and Chemists Societies (IUC 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).

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.

#### Introduction

Under REACH regulations, manufacturers of chemicals are required to register their products before placing them on the market. Accordingly, a new method is given for the determination of chromium (VI) in chromium tanning agents.

Chromium tanning agents consist of chromium sulfate, containing additional hydroxyl groups in different amounts. These tanning agents exhibit a reductive potential. In the presence of reducing agents the recovery rate of chromium (VI) can be significantly lower than 90 %.

Consequently another procedure has to be selected to determine the exact chromium (VI) content. This is based on the standard addition procedure, and was developed in consultation with TEGEWA working group "Leather Auxiliaries" (TEGEWA is the Association of German Manufacturers of Textile, Leather and Washing Agent chemical products).