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Chemicals for the leather tanning industry — Determination of the total content of certain bisphenols

Produits chimiques pour ~~l'industriel~~ l'industrie du tannage du cuir — Détermination de la teneur totale en certains bisphénols

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Foreword

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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 document 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).

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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 Chemical Test 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, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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.

Introduction

This document includes a procedure for analysing certain bisphenols in leather tanning chemicals using liquid chromatography (LC) equipment. With this analytical method, bisphenol A, bisphenol AF, bisphenol B, bisphenol F and bisphenol S can be determined.

In the leather industry, bisphenol F can be an impurity in synthetic tanning agents. Bisphenol S is a monomer that is used to manufacture synthetic tanning agents, which can lead to residues in the final product.

Bisphenol A is a synthetic organic chemical primarily used as a monomer in the manufacture of high-performance plastics, other polymers, such as resins, and in the colour developer for thermoprint paper. Bisphenol AF is a fluorinated organic compound that is an analogue of bisphenol A in which the two methyl groups are replaced with trifluoromethyl groups. Bisphenol B is similar to bisphenol A and is used in the manufacture of plastics and resins.

At present, the official European Chemicals Agency (ECHA) classification ~~recognised~~recognized in the European Union (EU) is the following:

- bisphenol A as ~~Toxic~~toxic to ~~Reproduction, Skin Sensitiser~~reproduction, skin sensitizer and endocrine disruptor.^[1]~~Endocrine Disruptor~~;^[1]
- bisphenol B as endocrine disruptor.^[2]~~Endocrine Disruptor~~;^[2]
- bisphenol S as ~~Toxic~~toxic to ~~Reproduction~~reproduction and endocrine disruptor.^[3]~~Endocrine Disruptor~~.^[3]

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