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Plastics — Determination of spray water delivery during spray cycles when using a xenon arc weathering test apparatus

Plastiques — Détermination du débit d'eau pendant les cycles de pulvérisation lors de l'utilisation d'une enceinte de vieillissement à arc au xénon

Reference number ISO 23741:2021(E)



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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 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).

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 6, *Ageing, chemical and environmental resistance*.

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 <u>www.iso.org/members.html</u>.

Plastics — Determination of spray water delivery during spray cycles when using a xenon arc weathering test apparatus

1 Scope

This document specifies general procedures to determine the quantity of water sprayed on specimens during a spray cycle in a xenon arc weathering test apparatus.

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 4892-1, Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance

ISO 4892-2, Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps

3 Terms and definitions

No terms and definitions are listed in this document.

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

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at http://www.electropedia.org/

4 Principle

Water delivery during accelerated weathering testing is important because materials in most outdoor environments experience long times of wetness. In order to quantify water delivery, a set of collecting devices is placed on a specimen tray or mounted to a specimen rack of a xenon arc weathering test apparatus. The instrument is set to a spray cycle and after a specified time, the collected amount of water is determined.

The quantity of water delivered to specimens is not necessarily the same as water absorbed by specimens. Other factors such as temperature, time of wetness, and specimen affinity for water can affect total water absorption, but delivery of sufficient water is a necessary prerequisite for adequate absorption.

5 Apparatus

5.1 The xenon arc weathering test apparatus shall conform to the requirements of ISO 4892-1 and ISO 4892-2.