TECHNICAL SPECIFICATION

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Road vehicles — Anti-fog coating for exterior lighting devices — Specification

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rieurs Véhicules routiers — Revêtement antibuée pour dispositifs d'éclairage extérieurs — Spécification





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO should not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22 *Road Vehicles*, Subcommittee SC 35 *Lighting and Visibility*.

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.

Road vehicles — Anti-fog coating for exterior lighting devices — Specification

1 Scope

This document specifies test methods and requirements for anti-fog coating of the exterior lighting devices of road vehicles.

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. The following referenced documents are indispensable for the application 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 2409, Paints and varnishes — Cross-cut test

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

ISO 13076, Paints and varnishes — Lighting and procedure for visual assessments of coatings

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

anti-fog coating

coating which is able to prevent or disguise all visible fogging on the inner surface of an outer lens made of glass, polycarbonate, polymethyl methacrylate or other materials

3.2

exterior lighting device

lighting device which is installed outside of a vehicle working as an illuminating or signalling function

4 General

4.1 Test condition

In general, all tests in this document are carried out in a standard laboratory with an air temperature of (23 ± 5) °C and a relative humidity of (50 ± 10) %.

4.2 Test specimens

4.2.1 All specimens shall be preconditioned at least 24 h in the air environment described in <u>4.1</u>. The coating should be protected against mechanical damage and pollutants whenever the specimens are treated.