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Road vehicles — Headlamp cleaners

Véhicules routiers — Dispositifs de nettoyage des projecteurs



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Foreword

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Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 3267 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Sub-Committee SC 8, *Lighting and signalling*.

This second edition cancels and replaces the first edition (ISO 3267:1975), of which it constitutes a technical revision.

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Road vehicles — Headlamp cleaners

1 Scope

This International Standard specifies the characteristics of headlamp cleaners for road vehicles.

2 Definitions

For the purposes of this International Standard, the following definitions apply.

2.1 headlamp cleaner: Complete device with which all or part of the light-emitting surface of a headlamp can be cleaned.

2.2 fluid container: That part of the headlamp cleaner in which the cleaning fluid is stored, as appropriate.

2.3 cleaning period: Period of time necessary to meet the requirements specified in clause 4, including any pretreatment period.

2.4 cleaning efficiency: Percentage of the illumination measured at the measuring points after cleaning by comparison with the values measured with the headlamp totally clean.

NOTE 1 Terms "lamp", "dipped-beam" and "main-beam" are in accordance with ISO 7227:1987, *Road vehicles — Lighting and light signalling devices — Vocabulary*.

3 General specifications

3.1 The headlamp cleaner shall be designed to operate at temperatures between $-10\text{ }^{\circ}\text{C}$ and $+35\text{ }^{\circ}\text{C}$ and at speeds between 0 and 130 km/h or the maximum speed of the vehicle if it is less than 130 km/h. These requirements do not apply if the cleaner is blocked by ice or snow. A temporary failure due to freezing or deposits of snow shall not be considered as a failure, provided that the device can be made to work again by simple means.

3.2 The headlamp cleaner shall be designed to retain its efficiency despite vibrations to which it may be subjected on the vehicle.

3.3 The headlamp cleaner shall not be functionally damaged by water, ice or snow accumulating on it during normal vehicle use, or if the cleaning fluid is frozen. Nor shall it be functionally damaged if it is exposed to temperatures of $-35\text{ }^{\circ}\text{C}$ and $+80\text{ }^{\circ}\text{C}$, both for 1 h.

3.4 The capacity of the fluid container shall be sufficient for at least 50 cleaning periods (see 2.3) for headlamp cleaners of "capacity class 50" and at least 25 cleaning periods for headlamp cleaners of "capacity class 25". If the fluid container supplies not only the headlamp cleaner but also the windscreen washer and the rear window washer, this capacity shall be increased by 1 l in all. It shall be easy to check the fluid level and the filling orifice shall be readily accessible.

3.5 All elements which may come in contact with the cleaning fluid shall be resistant against a mixture consisting of 50 % methyl alcohol, ethyl alcohol or isopropyl alcohol, and 50 % water.

3.6 If parts of the headlamp cleaner in the rest position(s) are on the headlamps' light-transmitting surface, the photometric values of the headlamps, measured at the points listed in the appropriate Regulation, for which minimum values are specified, shall not be reduced by more than 5 % in any normal rest position(s) of those parts, with respect to those values measured before installation of the headlamp cleaner; in no case shall these values be less than those prescribed in the Regulation in question.

This requirement does not apply when the headlamp and the parts of the headlamp cleaner have been approved as a complete assembly.

During operation, except in the rest position, the mechanical parts shall not cover more than 20 % of the light-transmitting surface of a dipped-beam