



**International
Standard**

ISO 18106

**Passenger car, commercial vehicle,
truck and bus tyres — Methods for
measuring snow grip performance
— Loaded new tyres**

*Pneumatiques pour voitures particulières, véhicules utilitaires,
camions et autobus — Méthodes de mesure de l'adhérence sur
neige — Pneumatiques neufs en charge*

**Second edition
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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 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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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 31, *Tyres, rims and valves*.

This second edition cancels and replaces the first edition (ISO 18106:2016), which has been technically revised.

The main changes are as follows:

- addition of the reference tyre ASTM F2493-24, SRTT P225/60R16;
- addition of new reference tyres ASTM F3677-23, SRTT 315/70R22.5 SW and ASTM F3678-25, SRTT 245/70R19.5 SW.

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

The methods developed in this document are meant to reduce the variability of the tyre snow grip performance measurement. The proper reference tyres must be used in order to limit the variability of the testing method procedures.

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Passenger car, commercial vehicle, truck and bus tyres — Methods for measuring snow grip performance — Loaded new tyres

1 Scope

This document specifies the method for measuring the relative snow grip performance index of a candidate tyre compared to a reference, under loaded conditions for new tyres intended to be used on passenger car, commercial vehicle, truck and bus vehicles on a snow packed surface.

This document applies to all passenger car, commercial vehicle, truck and bus tyres.

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 4000-1, *Passenger car tyres and rims — Part 1: Tyres (metric series)*

ISO 4209-1, *Truck and bus tyres and rims (metric series) — Part 1: Tyres*

ASTM E1136-19, *Standard Specification for P195/75R14 Radial Standard Reference Test Tire*

ASTM F1805-20, *Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces*

ASTM F2872-25, *Standard Specification for 225/75R16C 116/114S M+S Radial Light Truck Standard Reference Test Tire*

ASTM F2493-24, *Standard Specification for P225/60R16 97S Radial Standard Reference Test Tire*

ASTM F3677-23, *Standard Specification for 315/70R22.5 154/150L Radial Truck Standard Reference Test Tire SW*

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

passenger car tyre

tyres conforming to ISO 4000-1

3.2

commercial vehicle tyre

tyres conforming to ISO 4209-1 and identified by a load index in single configuration lower or equal to 121 and a speed symbol higher or equal to “N”