



MALAYSIAN STANDARD

MS 149:2018

New pneumatic passenger car tyres - Specification (Third revision)

ICS: 83.160.10

Descriptors: tyre, pneumatic tyre, specification, passenger car

© Copyright 2018

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For the purposes of Malaysian Standards, the following definitions apply:

Revision: A process where existing Malaysian Standard is reviewed and updated which resulted in the publication of a new edition of the Malaysian Standard.

Confirmed MS: A Malaysian Standard that has been reviewed by the responsible committee and confirmed that its contents are current.

Amendment: A process where a provision(s) of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into the existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

Technical corrigendum: A corrected reprint of the current edition which is issued to correct either a technical error or ambiguity in a Malaysian Standard inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication.

NOTE: Technical corrigenda are not to correct errors which can be assumed to have no consequences in the application of the MS, for example minor printing errors.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia
Ministry of Science, Technology and Innovation
Level 1 & 2, Block 2300, Century Square
Jalan Usahawan
63000 Cyberjaya
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
<http://www.jsm.gov.my>
E-mail: central@jsm.gov.my

OR **SIRIM Berhad**
(Company No. 367474 - V)
1, Persiaran Dato' Menteri
Section 2, P. O. Box 7035
40700 Shah Alam
Selangor Darul Ehsan
MALAYSIA

Tel: 60 3 5544 6000
Fax: 60 3 5510 8095
<http://www.sirim.my>
E-mail: msonline@sirim.my

Contents

	Page
Committee representation	ii
Foreword.....	iii
1 Scope	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Tyres and rims matching information.....	1
5 Requirements	5
6 Test methods.....	9
7 Sampling	9
Annex A Tyre size designation and dimensions	11
Annex B Method of measuring pneumatic tyres	13
Annex C Procedure for endurance test	14
Annex D Procedure for low inflation pressure performance test for radial tyre (not applicable for T-type temporary spare tyre)	15
Annex E Procedure for high speed performance tests.....	16
Annex F Procedure for strength tests.....	19
Annex G Procedure for bead unseating tests for tubeless tyre	20

MS 149:2018

Committee representation

The Industry Standards Committee on Transport (ISC L) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Automobile Association of Malaysia
Department of Environment
Department of Standards Malaysia
Jabatan Pengangkutan Jalan Malaysia
Malaysia Automotive Institute
Malaysian Automotive Association
Malaysian Automotive Components Parts Manufacturers Association
Malaysian Institute of Road Safety Research
Marine Department Malaysia
Ministry of Domestic Trade, Co-operatives and Consumerism
Ministry of International Trade and Industry
Ministry of Transport
Motorcycle and Scooter Assemblers and Distributor Association of Malaysia
Motosikal dan Enjin Nasional Sdn Bhd
PERODUA Manufacturing Sdn Bhd
Perusahaan Otomobil Nasional Sdn Bhd
Polis Diraja Malaysia
PUSPAKOM Sdn Bhd
Road Safety Department Malaysia
SIRIM Berhad (Secretariat)
Suruhanjaya Pengangkutan Awam Darat
Universiti Putra Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Tyres, Rims and Valves which developed this Malaysian Standard consists of representatives from the following organisations:

Automobile Association of Malaysia
Federation of Malaysian Manufacturers - Malaysian Automotive Tyre Manufacturers Industry Group
Jabatan Kastam Diraja Malaysia
Jabatan Keselamatan Jalan Raya
Jabatan Pengangkutan Jalan Malaysia
Malaysian Institute of Road Safety Research
Malaysian Rubber Board
Malaysian Rubber Products Manufacturers Association
Ministry of Domestic Trade, Co-operatives and Consumerism
Motorcycle and Scooter Assemblers and Distributors Association of Malaysia
PUSPAKOM Sdn Bhd
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd
Tyre Retreading Manufacturers' Associations of Malaysia
Universiti Teknologi MARA

Co-opted members:

Continental Tyre PJ Malaysia Sdn Bhd
Goodyear Malaysia Bhd
Silverstone Bhd
Toyo Tyre Malaysia Sdn Bhd

Foreword

This Malaysian Standard was developed by the Technical Committee on Tyres, Rims and Valves under the authority of the Industry Standards Committee on Transport.

Major modifications in this revision are as follows:

- a) elaboration on requirements;
- b) addition of clause on sampling; and
- c) subclauses on test methods for endurance, strength, high speed performance and bead unseating of tyre have been replaced with new requirements.

This Malaysian Standard cancels and replaces MS 149:2008, *New pneumatic passenger car tyres - Specification (Second revision)*.

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.