



# MALAYSIAN STANDARD

MS 118-4:2016

## Motor vehicle gasoline - Specification - Part 4: Unleaded Euro 5

ICS: 75.160.01

Descriptors: gasoline, unleaded, Euro 5, specification, test method

© Copyright 2016

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

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 8318 0002  
Fax: 60 3 8319 3131  
<http://www.jsm.gov.my>  
E-mail: [central@jsm.gov.my](mailto:central@jsm.gov.my)

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

## Contents

	<b>Page</b>
Committee representation .....	ii
Foreword.....	iii
1 Scope.....	1
2 Normative references .....	1
3 Grade.....	1
4 Composition and properties.....	1
5 Sampling.....	1
6 Marking and labelling.....	4
Annex A Normative references .....	5
Annex B Alternative test methods .....	6
Bibliography .....	7

## MS 118-4:2016

### Committee representation

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

Association of Malaysian Oil and Gas Engineering Consultants  
Department of Occupational Safety and Health Malaysia  
Department of Standards Malaysia  
Federation of Malaysian Manufacturers - Malaysian Industrial Gases Manufacturers Group  
Jabatan Bomba dan Penyelamat Malaysia  
Jabatan Pengangkutan Jalan Malaysia  
Kastam Diraja Malaysia  
Malaysian Gas Association  
Malaysian Palm Oil Board  
Malaysian Plastics Manufacturers Association  
Ministry of Domestic Trade, Co-operatives and Consumerism  
Ministry of International Trade and Industry  
Petroleum Nasional Berhad  
PETRON Malaysia Refining & Marketing Bhd  
PETRONAS Technical Services Sdn Bhd  
Shell Malaysia Trading Sdn Bhd  
SIRIM Berhad (Secretariat)  
Suruhanjaya Tenaga  
The Institution of Engineers, Malaysia  
Universiti Teknologi Malaysia  
Universiti Teknologi PETRONAS

The Technical Committee on Petroleum Fuels which developed this Malaysian Standard consists of representatives from the following organisations:

Automobile Association of Malaysia  
Boustead Petroleum Marketing Sdn Bhd  
Caltex Oil (M) Limited  
Department of Environment  
Department of Occupational Safety and Health Malaysia  
Jabatan Pengangkutan Jalan Malaysia  
Malaysian Automotive Association  
Malaysian Palm Oil Board  
Ministry of Domestic Trade, Co-operatives and Consumerism  
PETRON Malaysia Refining & Marketing Bhd  
PETRONAS Dagangan Berhad  
PETRONAS Fuel Technology  
PETRONAS Group Technical Solutions  
Science and Technology Research Institute for Defence  
Shell Global Solutions Malaysia  
Shell Malaysia Trading Sdn Bhd  
Shell Refining Company (FOM) Berhad  
SIRIM Berhad (Secretariat)  
Universiti Kebangsaan Malaysia  
Universiti Teknologi Malaysia

#### Co-opted members:

European Union Malaysian Chamber of Commerce and Industry  
Malaysian Biodiesel Association  
PETRON Malaysia Refining & Marketing Bhd (Refinery)

## **Foreword**

This Malaysian Standard was developed by the Technical Committee on Petroleum Fuels under the authority of the Industry Standards Committee on Petroleum and Gas.

MS 118 consists of the following parts, under the general title *Motor vehicle gasoline - Specification*:

*Part 2: Unleaded Euro 2M*

*Part 3: Unleaded Euro 4M*

*Part 4: Unleaded Euro 5*

The above Parts 2, 3 and 4 of MS 118 are the current standards in the series. However, MS 118: Part 1:1996, *Specification for motor vehicle gasoline: Part 1: Leaded gasoline (Third revision)* has been withdrawn without replacement.

During the development of this standard, reference was made to the ASEAN Automotive Federation requirements. However some specifications had been excluded.

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