



MALAYSIAN STANDARD

MS ISO 14704:2018

Fine ceramics (advanced ceramics, advanced technical ceramics) – Test method for flexural strength of monolithic ceramics at room temperature (ISO 14704:2016, IDT) (Second revision)

ICS: 81.060.30

Descriptors: test method, flexural strength, monolithic ceramic, fine ceramics

© Copyright 2018

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

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

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 are developed through consensus by committees which comprise of balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject in hand. These standards where appropriate are adoption of international standards. 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 of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into an existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

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

NOTE. Technical corrigendum are not to correct errors which can be assumed to have no consequence in the application of the Malaysian Standard, for example, minor printing errors.

The Department of Standards has appointed **Institut Kimia Malaysia (IKM)** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia

Century Square Level 1 & 2,
Block 2300, Jalan Usahawan,
63000 Cyberjaya, Selangor,
Malaysia
Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
<http://www.jsm.gov.my>
Email: central@jsm.gov.my

OR

Institut Kimia Malaysia

129A, Jalan Aminuddin Baki,
Taman Tun Dr Ismail
60000 Kuala Lumpur,
Malaysia
Tel: 60 3 7724 1929
Fax: 60 3 7725 1929
<http://www.ikm.org.my>
Email: ikm-sda@ikm.org.my

Committee representation

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

Department of Agriculture Malaysia
Department of Chemistry Malaysia
Department of Minerals and Geoscience Malaysia
Department of Occupational Safety and Health Malaysia
Department of Standards Malaysia
Malaysian Association of Standards Users
Malaysian Institute of Chemistry
Malaysian Institute of Chemistry (Secretariat)
Malaysian Paint Manufacturers' Association
Malaysian Pulp and Paper Manufacturers Association
Ministry of Domestic Trade, Co-operatives and Consumerism (Consumerism Standards Division)
Ministry of International Trade and Industry
National Water Services Commission
Universiti Malaya
Universiti Sains Malaysia

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

CeramTec Innovative Ceramic Engineering (M) Sdn Bhd
Institute of Materials Malaysia
Malaysian Institute of Chemistry (Secretariat)
Malaysian Nuclear Agency
Nanopac (M) Sdn Bhd
RS Advanced Technology Sdn Bhd
SIRIM Berhad
Universiti Kebangsaan Malaysia
Universiti Malaya
Universiti Putra Malaysia
Universiti Tun Hussein Onn Malaysia

MS ISO 14704:2018

National foreword

This adoption of the ISO Standard as a Malaysian Standard was recommended by the Technical Committee on Fine Ceramics under the authority of the Industry Standards Committee on Chemicals and Materials.

This Malaysian Standard is identical with ISO 14704:2016, *Fine ceramics (advanced ceramics, advanced technical ceramics) – Test method for flexural strength on monolithic ceramics at room temperature* published by the International Organization for Standardization (ISO). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, "this International Standard" should read "this Malaysian Standard";
- b) the comma which is used as a decimal sign (if any), to read as a point; and
- c) reference to International Standards should be replaced by Malaysian Standards as follows:

Referenced International Standards

Corresponding Malaysian Standards

ISO 3611, *Geometrical product specification (GPS) – Dimensional measuring equipment: Micrometers for external measurements – Design and metrological characteristics*

MS ISO 3611, *Micrometer callipers for external measurement*

ISO 7500-1, *Metallic materials – Calibration and verification of static uniaxial testing – Part 1: Tension/compression testing machines – Calibration and verification of the force-measuring system*

MS ISO 7500-1, *Metallic materials – Verification of static uniaxial testing machines – Part 1: Tension/compression testing machines – Verification and calibration of the force-measuring system*

This Malaysian Standard cancels and replaces MS ISO 14704:2009, *Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for flexural strength of monolithic ceramics at room temperature (First revision) (ISO 14704:2008, IDT)*

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

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, and wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.