



MALAYSIAN STANDARD

MS 133-E11:2010

**PAINTS AND VARNISHES - PART E11: BEND
TEST (CONICAL MANDREL)
(FIRST REVISION)
(ISO 6860:2006, MOD)**

ICS: 87.040

Descriptors: paints, varnishes, bend test, resistance, conical mandrel

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Committee representation

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

Department of Agriculture Malaysia
Department of Chemistry, Malaysia
Department of Standards Malaysia
Malaysian Association of Standards Users
Malaysian Ceramic Industry Group
Malaysian Institute of Chemistry
Malaysian Paint Manufacturers Association
Malaysian Pulp and Paper Manufacturers Association
Minerals and Geoscience Department Malaysia
Ministry of International Trade and Industry
Science and Technology Research Institute for Defence
SIRIM Berhad (Secretariat)
Universiti Malaya
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Paints and Varnishes which recommended the adoption of the ISO Standard consists of representatives from the following organisations:

ICI Paints (Malaysia) Sdn Bhd
IKRAM QA Services Sdn Bhd
Malaysian Paint Manufacturers Association
Revertex (M) Sdn Bhd
Science and Technology Research Institute for Defence
Seamaster Paint (Manufacturing) Berhad
SIRIM Berhad (Secretariat)
SIRIM QAS International Sdn Bhd (Product Certification and Inspection Department)
SIRIM QAS International Sdn Bhd (Testing Services Department)
Universiti Kebangsaan Malaysia
Universiti Teknologi Malaysia
Universiti Teknologi MARA

Co-opted member:

Jotun (M) Sdn Bhd

NATIONAL FOREWORD

The adoption of the ISO Standard as a Malaysian Standard was recommended by the Technical Committee on Paints and Varnishes under the authority of the Industry Standards Committee on Chemical and Materials.

This Malaysian Standard is the first revision of MS 133: Part E11, *Paints and varnishes - Part E11: Bend test (conical mandrel)*.

This standard is a modified adoption of ISO 6860:2006 (2009), *Paints and varnishes - Bend test (conical mandrel)*, published by the International Organization for Standardization (ISO) with the following modifications:

- 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;

c) Clause/Subclause	Modifications
5.3	Replace "(23 ± 2) °C and (50 ± 5) %" with "(27 ± 2) °C and (65 ± 5) %"
6.2	Replace "(23 ± 2) °C and (50 ± 5) %" with "(27 ± 2) °C and (65 ± 5) %"

Explanation: This standard modifies the requirements for temperature and relative humidity to reflect better the local weather conditions of high temperatures and humidity.

- d) reference to International Standards should be replaced by corresponding Malaysian Standards as follows:

<u>Referenced International Standards</u>	<u>Corresponding Malaysian Standards</u>
ISO 1513, <i>Paints and varnishes - Examination and preparation of samples for testing</i>	MS 133-A2, <i>Paints and varnishes - Part A2: Examination and preparation of samples for testing</i>
ISO 1514, <i>Paints and varnishes - Standard panels for testing</i>	MS 133-A3, <i>Methods of test for paints and varnishes - Part A3: Standard panels for testing</i>
ISO 2808, <i>Paints and varnishes - Determination of film thickness</i>	MS 133-C5, <i>Methods of test for paints and varnishes - Part C5: Determination of film thickness</i>