MALAYSIAN STANDARD

MS 133: PART J4:2008

PAINTS AND VARNISHES - COATING POWDERS - PART J4: CALCULATION OF LOWER EXPLOSION LIMIT (ISO 8130-4:1992 (2007), COR. 1:1993, IDT)

ICS: 87.040

Descriptors: coatings, powdery materials, paints, explosion index, rules of calculation

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

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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. 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.

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CONTENTS

Committee representation

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

Department of Mineral and Geoscience 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

Ministry of Agricultural and Agro-based Industry (Department of Agriculture)

Ministry of Defence (Science and Technology Research Institute for Defence)

Ministry of International Trade and Industry

Ministry of Science, Technology and Innovation (Department of Chemistry, Malaysia)

SIRIM Berhad (Secretariat)

Universiti Malaya

Universiti Sains Malaysia

The Technical Committee on Paints and Varnishes which developed this Malaysian Standard consists of representatives from the following organisations:

ICI Paints (Malaysia) Sdn Bhd

IKRAM QA Services Sdn Bhd

Malaysian Paints 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 (Chemical Testing Section)

SIRIM QAS International Sdn Bhd (Product Certification Section)

Universiti Kebangsaan Malaysia

Universiti Teknologi Malaysia

Universiti Teknologi MARA

Co-opted members:

Jotun Paint (M) Sdn Bhd

Jotun Powder Coatings (M) Sdn Bhd

NATIONAL FOREWORD

This Malaysian Standard was developed by the Technical Committee on Paints and Varnishes under the authority of the Chemical and Materials Industry Standards Committee.

This Malaysian Standard is identical with ISO 8130-4:1992, *Paints and varnishes - Coating powders - Part 4: Calculation of lower explosion limit* and its Corrigendum 1:1993, 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 Standard which has been withdrawn should be replaced with the latest publication as follows:

Referenced International Standard	Referenced International Standard
ISO 842:1984, *Raw materials for paints and varnishes - Sampling* (withdrawn)	ISO 15528, *Paints, varnishes and raw materials for paints and varnishes - Sampling*

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.

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8130-4 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Sub-Committee SC 9, *General test methods for paints and varnishes*.

ISO 8130 consists of the following parts, under the general title *Coating powders*:

- *Part 1: Determination of particle size distribution by sieving*
- *Part 2: Determination of density by gas comparison pyknometer (referee method)*
- *Part 3: Determination of density by liquid displacement pyknometer*
- *Part 4: Calculation of lower explosion limit*
- *Part 5: Determination of flow properties of a powder/air mixture*
- *Part 6: Determination of gel time of thermosetting coating powders at a given temperature*
- *Part 7: Determination of loss of mass on stoving*
- *Part 8: Assessment of the storage stability of thermosetting powders*
- *Part 9: Sampling*

Annex A of this part of ISO 8130 is for information only.