



MALAYSIAN STANDARD

MS 733:2008

WOOD PRESERVATIVES FOR COPPER/CHROMIUM/ARSENIC (CCA) - SPECIFICATION (SECOND REVISION)

ICS: 71.100.50

Descriptors: wood preservatives, timber, CCA

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DEPARTMENT OF STANDARDS MALAYSIA

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Committee representation

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

Department of Standards Malaysia
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 Agriculture and Agro-based Industry (Department of Agriculture Malaysia)
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)
Universiti Malaya
Universiti Sains Malaysia

The Technical Committee on Wood Preservation which supervised the development of this Malaysian Standard was managed by the Malaysian Wood Preserving Association in its capacity as an authorised Standards-Writing Organisation and consists of representatives from the following organisations:

Department of Agriculture Malaysia (Pesticides Board)
Forest Research Institute Malaysia
Malaysian Timber Industry Board
Malaysian Wood Preserving Association (Secretariat)
Sarawak Forestry Corporation Sdn Bhd (Sarawak Forest Department)
SIRIM Berhad
SIRIM QAS International Sdn Bhd
Universiti Teknologi MARA

The Working Group on Wood Preservatives for CCA which developed this Malaysian Standard consists of representatives from the following organisations:

Arch Wood Protection (M) Sdn Bhd
Celcure Chemicals (M) Sdn Bhd
Department of Agriculture Malaysia (Pesticides Board)
Forest Research Institute Malaysia
Kenso Corporation (M) Sdn Bhd
Malaysian Timber Industry Board
Malaysian Wood Preserving Association (Secretariat)
Nufarm Technologies (M) Sdn Bhd
Protim Solignum
Universiti Teknologi MARA

FOREWORD

This Malaysian Standard was developed by the Working Group on Wood Preservatives for CCA under the authority of the Industry Standards Committee on Chemical and Materials. Development of this standard was carried out by Malaysian Wood Preserving Association (MWPA) which is the Standards-Writing Organisation (SWO) appointed by SIRIM Berhad to develop standards for wood preservation.

This Malaysian Standard is the second revision of MS 733, *Specification for copper/chromium/arsenic wood preservatives (first revision)*.

Major modifications in this revision are as follows:

- a) Clause 3: Composition of preservative; where oxide formulations were added. The preservatives shall consist of mixtures of copper (II) , chromium (VI) and arsenic (V) either in salt (Table 1) or oxide (Table 2) form. Two formulations are specified, designated as Type 1 and Type 2;
- b) Additions of Clause 4. Properties of preservatives, Clause 5. Sampling of preservatives, Clause 6. Quantitative analysis of preservatives, Clause 9. Handling, Clause 10. Storage, Clause 11. Transportation, Clause 12. Disposal and Annex A. Determination of pH; and
- c) Annex B. Methods of Sampling. Addition of B2.2 Preservatives in liquid form.

This Malaysian Standard cancels and replaces MS 733:1992.

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

WOOD PRESERVATIVES FOR COPPER/CHROMIUM/ARSENIC (CCA) - SPECIFICATION (SECOND REVISION)

1. Scope

1.1 This Malaysian Standard specifies requirements for water-borne wood preservatives, which consist essentially of mixtures in compounds of copper, chromium and arsenic (CCA). This specification covers two mixtures of composition for preservatives, i.e. Type 1 and Type 2; and sampling procedures.

1.2 The chemical analysis and specification for the treatment of timber with CCA is as specified in MS 821 and MS 360 respectively.

CAUTION: Attention is drawn to the mandatory requirement that the CCA timber preservative marketed in Malaysia including their importation, manufacturing, sales and storage for sale shall be registered with the Pesticides Board under the Pesticides Act 1974.

2. Normative references

The following normative references are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the normative references (including any amendments) apply.

MS 821, *Methods for the quantitative analysis copper/chromium/arsenic preservative formulation and treated timber*

MS 360, *Specification for treatment of timber with copper/chromium/arsenic wood preservative*

MS 409, *Code of practice for the packaging and storage of pesticides*

BS 4072:1999, *Copper/chromium/arsenic preparations for wood preservation*

Pesticides Act 1974 (Act 149)

Environmental Quality Act 1974 (Act 127)

3. Composition of preservatives

The preservatives shall consist of mixtures of copper (II), chromium (VI) and arsenic (V) either in salt (Table 1) or oxide (Table 2) form. Two formulations are specified, designated as Type 1 and Type 2. The nominal and minimum proportions of each component in the preservative formulations shall be as specified in the respective tables. The sum of the proportions of the individual components shall be not less than 95 % (m/m).

NOTES:

1. The usual forms are as a paste or as a concentrated solution for subsequent dilution.
2. Variations in composition from the nominal composition may arise because of variations in the purity of the ingredients of the mixture.
3. Preservatives as supplied may vary in concentration as a result of variations in water content.