



MALAYSIAN STANDARD

MS 1265-4:2018

Code of good irradiation practice - Part 4: Cereal and their milled products for insect disinfection and microbial control (Second revision)

ICS: 67.020

Descriptors: code of practice, irradiation, ionising, radiation treatment, cereal, milled products, insect disinfection, microbial control

© Copyright 2018

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

Tel: 60 3 8318 0002
Fax: 60 3 8319 3131
<http://www.jsm.gov.my>
E-mail: central@jsm.gov.my

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 5544 6000
Fax: 60 3 5510 8095
<http://www.sirim.my>
E-mail: msonline@sirim.my

Contents

	Page
Committee representation	ii
Foreword.....	iii
1 Scope	1
2 Normative references.....	1
3 Pre-irradiation treatment of cereal grains.....	1
4 Packaging.....	2
5 Pre-irradiation storage and transport	2
6 Irradiation	2
7 Post-irradiation handling and storage	3
8 Labelling.....	3
9 Re-irradiation	3
10 Quality of cereal and their milled products irradiated for insect disinfestation	3
11 Hygiene of irradiated cereal grains.....	3
Bibliography	4

MS 1265-4:2018

Committee representation

The Industry Standards Committee on Food, Food Products and Food Safety (ISC U) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Department of Agriculture Malaysia
Department of Chemistry, Malaysia
Department of Standards Malaysia
Department of Veterinary Services
Federal Agricultural Marketing Authority
Federation of Malaysian Manufacturers
Jabatan Kemajuan Islam Malaysia
Malaysian Agricultural Research and Development Institute
Malaysian Association of Standards Users
Malaysian Institute of Food Technology
Malaysian Palm Oil Board
Ministry of Health Malaysia
Ministry of International Trade and Industry
SIRIM Berhad (Secretariat)
SME Corporation Malaysia
Universiti Kebangsaan Malaysia
Universiti Putra Malaysia

The Working Group on Food Irradiation which developed this Malaysian Standard consists of representatives from the following organisations:

Department of Agriculture Malaysia
Department of Fisheries Malaysia
Department of Veterinary Services
Malaysian Agricultural Research and Development Institute
Malaysian Nuclear Agency
Ministry of Health Malaysia
SIRIM Berhad (Secretariat)
Universiti Putra Malaysia

Foreword

This Malaysian Standard was developed by the Working Group on Food Irradiation under the authority of the Industry Standards Committee on Food, Food Products and Food Safety.

MS 1265 consists of the following parts, under the general title *Code of good irradiation practice*:

Part 1: General

Part 2: Bulb and tuber crops for sprout inhibition

Part 3: Fresh fruits and vegetables for insect disinfestation

Part 4: Cereal and their milled products for insect disinfestation and microbial control

Part 5: Dried fish and dried salted fish for insect disinfestation, reduction of pathogenic microorganisms and control of moulds

Part 6: Bananas, mangoes and papayas for shelf-life extension

Part 7: Fish, shrimps and frog legs for the control of microflora and pathogens and/or shelf-life extension

Part 8: Prepackaged meats and poultry for the control of pathogens and/or shelf-life extension

Part 9: Spices, herbs and vegetable seasonings for the control of pathogens, microflora and/or insect disinfestation

Part 10: Dried meat and dried salted meat of animal origin for insect disinfestation, control of moulds and reduction of pathogenic microorganisms

Major modifications in this revision are as follows:

- a) the requirements and guidance have been revised;
- b) the packaging and labelling requirements have been revised based on *Food Irradiation Regulations 2011*; and
- c) new clauses have been added to include more requirements based on *Food Irradiation Regulations 2011*.

This Malaysian Standard cancels and replaces MS 1265: Part 4:2005, *Code of good irradiation practice - Part 4: Cereal grains for insect disinfestations*.

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