



Federation of Malaysia



EDICT OF GOVERNMENT



In order to promote public education and public safety, equal justice for all, a better informed citizenry, the rule of law, world trade and world peace, this legal document is hereby made available on a noncommercial basis, as it is the right of all humans to know and speak the laws that govern them.

MS 1118 (2008) (English): MALAYSIAN COCOA BUTTER
- SPECIFICATION (FIRST REVISION)



BLANK PAGE





MALAYSIAN STANDARD

MS 1118:2008

MALAYSIAN COCOA BUTTER - SPECIFICATION (FIRST REVISION)

ICS: 67.140.30

Descriptors: cocoa butter, specification

© Copyright 2008

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.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell the 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.standardsmalaysia.gov.my>

E-mail: central@standardsmalaysia.gov.my

SIRIM Berhad
(Company No. 367474 - V)
1, Persiaran Dato' Menteri
Section 2
40000 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
0 Introduction	1
1 Scope	1
2 Normative references.....	1
3 Definition	1
4 Categories of Malaysian cocoa butter.....	2
5 Essential compositions and quality requirements.....	2
6 Metal tolerance.....	3
7 Hygiene	3
8 Labelling	3
9 Storage.....	4
10 Legal requirements	4
11 Analysis and test report.....	4
12 Sampling	4
13 Compliance	4
14 Certification mark.....	4
Tables	
1 Analytical characteristics of Malaysian cocoa butter	2
2 Metal tolerance for cocoa butter	3
Annex A Guide to storage of cocoa butter.....	5

Committee representation

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

Department of Agriculture, Malaysia
Department of Standards Malaysia
Federal Agricultural Marketing Authority
Federation of Malaysian Manufacturers
Malaysian Agricultural Research and Development Institute
Malaysian Association of Standards Users
Malaysian Institute of Food Technology
Malaysian Palm Oil Association
Malaysian Palm Oil Board
Ministry of Agriculture and Agro-based Industry
Ministry of Health Malaysia
Ministry of Science and Technology (National Biotechnology Division)
Universiti Kebangsaan Malaysia
Universiti Putra Malaysia

The Technical Committee on Cocoa and Chocolate Products which developed this Malaysian Standard consists of representatives from the following organisations:

Barry Callebaut Malaysia Sdn Bhd
CocoaHouse Industries Sdn Bhd
Department of Agriculture, Malaysia
Guan Chong Cocoa Manufacturer Sdn Bhd
JB Cocoa Sdn Bhd
Malaysian Agricultural Research and Development Institute
Malaysian Cocoa Board
Malaysian Palm Oil Board
Ministry of Health Malaysia
Universiti Kebangsaan Malaysia
Universiti Putra Malaysia

FOREWORD

This Malaysian Standard was developed by Technical Committee on Cocoa and Chocolate Products under the authority of the Industry Standards Committee on Food and Food Products.

This Malaysian Standard is the first revision of MS 1118, *Cocoa butter specification*.

Major modifications in this revision are as follows:

- a) the definition of cocoa butter has been updated;
- b) the previous table 1 (solid fat content of Malaysian cocoa butter) has been removed as requested by industries;
- c) the characteristics in previous table 2 (Analytical characteristics of Malaysia cocoa butter) has omitted the data for categories, refractive index and blue value max as per current quality requirement;
- d) the requirement for metal tolerance has been tabulated as table 3 (Metal tolerance for Cocoa butter) and the requirements as per current regulation;
- e) the labeling and hygiene requirements have been revised and amended according to current regulation;
- f) exclusion of Appendix A (Definitions and essential composition of cocoa beans, cocoa nib, cocoa mass and cocoa press cake); and
- g) Appendix B (Guide to storage of cocoa butter) has been renamed as Annex A (Guide to storage of cocoa butter).

This Malaysian Standard cancels and replaces MS 1118:1988.

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

MALAYSIAN COCOA BUTTER - SPECIFICATION (FIRST REVISION)

0. Introduction

This Malaysian Standard is the improvement of the specification in terms of quality of cocoa butter. With the existence of this standard, manufacturers can conform to a uniform standard of quality for cocoa butter use as ingredient in the manufacture of chocolates and chocolate related products.

1. Scope

This Malaysian Standard specifies the requirements for Malaysian cocoa butter.

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 editions of the normative references (including any amendments) apply.

MS 293, *Specification for grading cocoa beans*

MS 1119, *Method of analysis for Malaysian cocoa butter and Malaysian cocoa powder*

MS 1263, *Method of sampling of Malaysian cocoa powder and Malaysian cocoa butter*

MS 1376, *Specification for cocoa mass*

Malaysian Food Act 1983 and Food Regulations 1985

3. Definition

For the purpose of this Malaysian Standard, the following definitions apply;

Cocoa butter is the fat obtained from the following: Cocoa beans, cocoa nibs, and cocoa mass, (MS 293 and MS 1376) by mechanical or chemical process.

4. Categories of Malaysian cocoa butter

4.1 Cocoa butter may be produced and known as follows:

- a) untreated;
- b) deodorised;
- c) degummed and deodorised; and
- d) degummed, bleached and deodorised.

4.2 Pure Prime Pressed (PPP) or natural cocoa butter

It is the fat obtain as stated in 4.1 (a).

4.3 Degummed and deodorised PPP Cocoa Butter

It is the fat treated as stated in 4.1 (c).

4.4 Refined PPP Cocoa Butter

It is the fat treated as stated in 4.1 (d).

5. Essential compositions and quality requirements

5.1 The colour, odour and taste of all types of cocoa butter shall be characteristics of the designated product and shall be free from foreign odour and taste.

5.2 The analytical characteristics for Malaysian cocoa butter are shown in Table 1.

Table 1. Analytical characteristics for Malaysian cocoa butter

Melting point(Capillary tube - tempered method)		Free fatty acid; % m/m oleic acid, maximum	Saponification value, mg KOH/g fat	Iodine value (Vij's)	Unsaponifiable matter (petroleum ether) % m/m, maximum
Slip melting point	Clear melting point				
31° to 34 °C	32° to 35 °C	1.75	188 to 198	32 to 38	0.6

6. Metal tolerance

The requirements for metal tolerances are described in Table 2.

Table 2. Metal tolerance for cocoa butter

Metal	Maximum level (ppm)
Arsenic (As)	0.5
Lead (Pb)	0.5
Mercury(Hg)	0.05

7. Hygiene

7.1 The hygienic practices shall comply with all the relevant statutory requirements or regulations relative to food processing, packaging, handling and hygiene currently enforced in Malaysia (Malaysian Food Act 1983 and Food Regulations 1985).

7.2 As much as possible in accordance to the good manufacturing practice, the products shall be free from objectionable matter.

7.3 When tested by appropriate methods of sampling and examination, the products shall not contain any substances originating from microorganisms in amount, which may represent hazard to health; and ensure the products are free of pathogenic microorganisms.

8. Labelling

8.1 Each container shall be marked legibly and indelibly or a label shall be attached to the container, with the following information:

- a) name of the product;
- b) name and address of the manufacturer;
- c) minimum net weight;
- d) code number or marking device indicating month and year of manufacture; and
- e) in the case of food produced, prepared or packaged in Malaysia, it shall be in Bahasa Malaysia and may include translation in other languages.

8.2 Net content

The net content shall be declared by weight in the metric or any other system of measurement.

8.3 Bulk packs

The information required by 8.1 and 8.2 shall either be given on the container or be given in accompanying documents except that the name of the product and the name and address of the manufacturer or packer shall appear on the container. However, the name and address of the manufacturer or packer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying document.

9. Storage

Recommendations relating to storage are given as a guide in Annex A.

10. Legal requirements

The product shall in all other aspects comply with the requirements of the legislations currently enforced in Malaysia.

11. Analysis and test report

This activity shall be carried out in accordance with the procedure laid down in MS 1119.

12. Sampling

Representative samples of the product shall be drawn as prescribed in MS 1263: 1992, 'Method of sampling for Malaysian cocoa powder and Malaysian cocoa butter.

13. Compliance

Upon testing, when each of the samples is found to conform to the requirements specified in the standard, the lot, batch or consignment from which the samples have been drawn shall be deemed to comply with this standard.

14. Certification mark

Each product, may by arrangement with a recognised certification body, be marked with the certification mark of that body, provided the product conforms to the requirements of this Malaysian Standard.

Annex A
(informative)

Guide to storage of cocoa butter

A1. The optimal conditions for storage are as follows;

- a) a low relative humidity of the surrounding air, if possible under 65 %;
- b) a temperature not exceeding 25°C, fluctuations in temperature should be avoided;
- c) clean, well lit rooms, free of insects, rodents and other vermin;
- d) absence of strong smelling foreign odours; and
- e) stack at an adequate distance from both walls and floor.

Acknowledgements

Members of Technical Committee on Cocoa and Chocolate Products

Mr Jumali Suratman (Chairman)
Ms Irma Munirah Alias (Secretary)
Ms Agnes Chen
Ms Chang Pik Yeen
Mr Mohamad Idrus Ab. Hamid
Mr Pow Chun Chung
Ms Saw Poh Chin
Ms Sharifah Samsiah Mohamad

Mr Omar Tompong/
Dr Sabariah Samsudin
Ms Salmi Yati Shamsudin
Ms Shazlina Mohd Zaini
Dr Nazaruddin Ramli
Prof Dr Jinap Selamat

Malaysian Cocoa Board
SIRIM Berhad
Barry Callebaut Malaysia Sdn Bhd
CocoaHouse Industries Sdn Bhd
Department of Agriculture, Malaysia
Guan Chong Cocoa Manufacturer Sdn Bhd
JB Cocoa Sdn Bhd
Malaysian Agricultural Research and
Development Institute
Malaysian Cocoa Board

Malaysian Palm Oil Board
Ministry of Health Malaysia
Universiti Kebangsaan Malaysia
Universiti Putra Malaysia