
MALAYSIAN STANDARD

MS 1110 : PART 3 : 1989
ICS : 07.100.30, 67.220.20

STANDARD ON MICROBIOLOGICAL
EXAMINATION OF MEAT AND
MEAT PRODUCTS
PART 3 : ENUMERATION OF MESOPHILIC
AEROBIC PLATE COUNT



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This Malaysian Standard, which had been approved by the Food and Agricultural Industry Standards Committee and endorsed by the Council of the Standards and Industrial Research Institute of Malaysia (SIRIM) was published under the authority of the SIRIM Council in March, 1989.

SIRIM wishes to draw attention to the fact that this Malaysian Standard does not purport to include all the necessary provisions of a contract.

The Malaysian Standards are subject to periodical review to keep abreast of progress in the industries concerned. Suggestions for improvements will be recorded and in due course brought to the notice of the Committees charged with the revision of the standards to which they refer.

The following references relate to the work on this standard:

Committee reference : SIRIM 401/2/4

Draft for comment : D 149 (ISC A)

Amendments issued since publication

Amd. No.	Date of issue	Text affected

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Committee representation

The Food and Agricultural Industry Standards Committee under whose supervision this Malaysian Standard was prepared, comprises representatives from the following Government Ministries, trade, commerce and manufacturer associations and scientific and professional bodies.

Federal Agricultural Marketing Authority
 Federation of Malaysian Consumers Association
 Federation of Malaysian Manufacturers
 Malaysian Agricultural Research and Development Institute
 Ministry of Agriculture (Agriculture Department)
 National Chambers of Commerce and Industry of Malaysia
 Oil Palm Growers' Council of Malaysia
 Rubber Producers' Council of Malaysia
 Rubber Research Institute of Malaysia
 Universiti Pertanian Malaysia

The Technical Committee on Poultry and Meat Products - Fresh, Frozen and Processed which prepared this Malaysian Standard consists of the following representatives:

Encik Ahmad Tajuddin Zainuddin/ Dr. Wan Hassan Wan Embong (Chairman)	Malaysian Agricultural Research and Development Institute
Dr. Zaliha Abdullah/ Dr. M. Sivamoorthy	Veterinary Service Department
Encik Chuah Eng Chong	Malaysian Agricultural Research and Development Institute
Encik Kok Sek Kee/	Malaysian International Chambers of Commerce and Industry
Encik Ng Hong Soi	(Cold Storage (M) Bhd.)
Encik David Yeo Siew Lim/ Puan Eu Leng Khim	Yeo Hiap Seng (M) Bhd.
Encik Yeo Chee Yan	Federation of Malaysian Manufacturers
Puan Nik Shabnam Nik Mohd Salleh	Ministry of Health
Puan Salmah Muda	Defence Science and Technology Centre
Encik Hoo Ah Teng	Malaysian Industrial Development Authority
Encik Khoo Chiew Song	Penang and Province Wellesley Farmers' Association
Encik Mohd. Hamdan Adnan	Federation of Malaysian Consumers Association
Dr. Abdullah Abu Bakar (Co-opted member)	Universiti Pertanian Malaysia
Prof. Madya Dr. Abdul Salam Hj. Babji (Co-opted member)	Universiti Kebangsaan Malaysia
Puan Puziah Hashim/ Encik Ahmad Ismail/ Encik C.K. Venugopal/	Standards and Industrial Research Institute of Malaysia
Puan Saleha A. Jalil (Secretary)	Standards and Industrial Research Institute of Malaysia

FOREWORD

This Malaysian Standard was prepared by the Technical Committee on Poultry and Meat Products - Fresh, Frozen and Processed, under the authority of the Food and Agricultural Industry Standards Committee.

Methods used to determine pathogens are less effective when the pathogen is sparsely distributed in a food. This has led to the widespread use of groups called indicator which are more readily enumerated, and whose presence in foods has value in assessing both the microbiological safety and quality of foods. One of the several indicator microorganisms is mesophilic aerobic microorganism.

This standard purports to introduce into Malaysia uniform methods of test for meat and meat products. It does not deal with the specification of the material but prescribes only the method for determining whether the material conforms to the requirements of the individual standard and thus forms a necessary adjunct to the Malaysian Standards for individual meat and meat products.

This standard is one of a series of standards on microbiological examination of meat and meat products. There are several parts in this series of methods of test.

In the preparation of this standard, the following references were referred to:

- (a) ISO 2293, 'Meat and meat products - Aerobic count at 30°C (Reference method)'.
- (b) ISO 4833, 'Microbiology - General guidance for enumeration of microorganisms - colony count technique at 30°C'.
- (c) Manuals of food quality control - 4. Microbiological analysis : F7, FAO food and nutrition paper 14/4, Rome, 1979.
- (d) Compendium of methods for the microbiological examination of foods : 8, American Public Health Association (APHA), 1976.

This standard is to be used in conjunction with the following standard:
MS 953, 'Methods of sampling for meat and meat products'.