
MALAYSIAN STANDARD

MS 14 : PART 2 : 1993
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**SPECIFICATION FOR UREA, FERTILIZER GRADE
PART 2 : PRILLED UREA
(FIRST REVISION)**



SIRIM

STANDARDS & INDUSTRIAL RESEARCH INSTITUTE OF MALAYSIA

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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 482/2

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Amendments issued since publication

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CONTENTS

	Page
Committee representation	iii
Foreword	iv
1 Scope	1
2 Requirements	1
3 Packaging and marking	2
4 Sampling	2
5 Testing	2
6 Compliance	2
 Tables	
1 Composition of prilled urea	1
2 Other requirements	1

Committee representation

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

Federation of Malaysian Manufacturers
Institut Kimia Malaysia
Malaysian Ceramic Industry Group
Malaysian Paint Manufacturers Association
Ministry of Agriculture (Agricultural Department)
Ministry of Defence (Defence Science and Technology Centre)
Ministry of Primary Industries (Geological Survey Department)
Ministry of Science, Technology and the Environment (Chemistry Department)

The Working Group on Fertilizers which prepared this Malaysian Standard consists of the following representatives:

Encik Poon Yew Chin (Chairman)	The Malaysian Society of Soil Science
Dr. Abdul Aziz Hj. Bidin	Malaysian Agriculture Research and Development Institute
Dr. Lau Chee Heng	Rubber Research Institute of Malaysia
Dr. Zin Z. Zakaria	Palm Oil Research Institute of Malaysia
Dr. Soong Ngim Kw i	Malaysian Rubber Producers' Council
Encik Chong Kok San/Encik Peter Shanta	Federation of Malaysian Manufacturers
Encik Leong Cheng Woh	Felda Agricultural Services Corporation
Encik Lee San Chin	Department of Agriculture
Encik Eddie Chew/Encik Wong Kean Hong/	Fertilizer Industry Association of Malaysia
Encik Loke Keng Hung	
Cik Fazila Abu Bakar	Malaysian Industrial Development Authority
Encik Chan Khoo San	Malaysian Oil Palm Growers' Council
Encik Ler Leong Tat/	
Cik Mary Ngu Toh Ing (Secretary)	Standards and Industrial Research Institute of Malaysia

Co-opted members:

Dr. Alias Husin	Petroleum Research Institute
Dr. Sharifuddin A. Hamid	National Association Small Holder
Encik Ramakrishnan	FPM Sdn. Bhd.
Encik Hanifuddin Abdul Rahman	Rubber Industry and Smallholder Development Authority

Invited member:

Tn. Hj. Mohd Nor Abu Bakar	ASEAN Bintulu Fertilizers
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MS 14 : PART 2 : 1993

FOREWORD

This Malaysian Standard was prepared by the Working Group on Fertilizers established under the authority of Chemical and Pharmaceutical Industry Standards Committee.

This standard was first published in 1971 as MS 14 - 'Specification for urea, fertilizer grade'.

The major changes featured in this revision are as follows:

- (1) Granular and prilled urea had been differentiated into two specifications.
- (2) The particle size of prilled urea.

In this revision, references were made to:

- (1) Specifications for urea manufactured locally.
- (2) Specifications for urea published by U.S. Agency for International Development (USAID).
- (3) Official Journal of the European Communities and the Fertilizer (Control) Order, 1985 and the Essential Commodities Act, 1985 by the Fertilizer Association of India. New Delhi.
- (4) Specifications for urea of two commercial manufacturers in United States.

This standard is to be used in conjunction with the Malaysian Standard MS 417, The analysis of fertilizers. This standard consists of eight parts as follows:

- (1) Part One: Method of sampling and sample preparation.
- (2) Part Two: Method for the determination of moisture content, particle size and ash content.
- (3) Part Three: Method for the determination of nitrogen.
- (4) Part Four: Method for the determination of phosphorus.
- (5) Part Five: Method for the determination of potassium.
- (6) Part Six: Method for the determination of magnesium.
- (7) Part Seven: Method for the determination of boron.
- (8) Part Eight: Method for the determination of secondary properties.

This Malaysian Standard supersedes MS 14:1971.