SRI LANKA STANDARD 1029 : PART 3: 1994

UDC 631.82 : 634.616

SPECIFICATION FOR FERTILIZER MIXTURES
PART 3 : COCONUT

SRI LANKA STANDARDS INSTITUTION

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SLS 1029 : Part 3 : 1994

Gr. 4

SRI LANKA STANDARDS INSTITUTION
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Colombo 3,
Sri Lanka.

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

Sri Lanka Standard
SPECIFICATION FOR FERTILIZER MIXTURES
Part 3 : Coconut

FOREWORD

This standard was approved by the Sectoral Committee on Chemicals and Chemical Technology and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 94-12-22.

Guidelines for the determination of compliance of a lot with the requirements of this standard based on statistical sampling and inspection are given in Appendix A.

For the purpose of deciding whether a particular requirement of this specification complied with, the final value, observed or calculated, expressing the result of a test or an analysis, shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this specification.

In addition to the recommended fertilizer mixtures, Coconut Research Institute also recommends straight fertilizers for mature coconut plantations in the estate sector based on soil and foliar analysis.

1 SCOPE

This specification prescribes the requirements and methods of test for fertilizer mixtures for coconut.

2 REFERENCES

CS 102 Presentation of numerical values
CS 124 Test sieves
SLS 559 Sampling of fertilizers
SLS 618 Urea
SLS 620 Ammonium Sulfate
SLS 644 Potassium chloride (muriate of potash)
SLS 645 Methods of test for fertilizers
SLS 748 Ground rock phosphate
SLS 823 Dolomite

3 TYPES

Fertilizer mixtures for coconut shall be of the following types:

3.1 YPM 1 - Young palm mixture urea based
3.2 YPM 2 - Young palm mixture sulfate of ammonia based
3.3 APM 1 - Adult palm mixture urea based
3.4 APM 2 - Adult palm mixture sulfate of ammonia based
3.5 APM 3 - Adult palm mixture without nitrogen

4 REQUIREMENTS

4.1 General requirements

The material shall free from visible foreign matter.

4.2 Other requirements

4.2.1 The material shall also comply with requirements given in Table 1, when tested in accordance with the methods given in SLS 645.

4.2.2 A tolerance of ± 5 per cent shall be permitted for all nutrients.

TABLE 1 - Requirements for fertilizer mixtures for coconut

Sl. No. (1)	Mixture (2)	Nutrient Content			
		N as N, per cent by mass (3)	P as P_2O_5 per cent by mass (4)	K as K_2O, per cent by mass (5)	Mg as MgO per cent by mass (6)
i)	YPM 1	13	12	17	-
ii)	YPM 2	09	09	13	-
iii)	APM 1	12	6	32	-
iv)	APM 2	09	04	24	-
v)	YPM 3	00	06	32	5

NOTES

1. *For YPM 1, YPM 2, APM 1 and APM 2 phosphorus source is imported rock phosphate conforming to SLS 748.*
2. *For YPM 3 phosphorus source is 1:1 mixtures of Eppawela rock phosphate and imported rock phosphate conforming to SLS 748.*
3. *For all mixtures the potassium source is muriate of potash (potassium chloride) conforming to SLS 644.*
4. *For YPM 3 recommended magnesium source is dolomite conforming to SLS 823.*

5. *For YPM 1 and APM 1 nitrogen source is urea conforming to SLS 618.*
6. *For YPM 2 and APM 2 nitrogen source is sulfate of ammonia conforming to SLS 620*

5 PACKAGING AND MARKING

5.1 Packaging

The material shall be supplied in sound, strong and moisture proof packages or containers. Suitable packages include polypropylene or jute bags with an inner lining of low density polyethylene having a minimum thickness of 37.5 µm or any other material having barrier properties superior or equal to low density polyethylene of 37.5 µm thickness. The material may also be supplied in bulk containers as agreed to between the purchaser and the supplier.

5.2 Marking

5.2.1 The following shall be legibly and indelibly marked or labelled on each package or container:

a) Name and type of the fertilizer mixture, in capital letters;
b) Total nutrient content, per cent by mass;
c) Name and address of the manufacturer;
c) Registered trade mark, if any;
e) Net mass, in kilograms;
f) Batch or code number;
g) Date or month and year of manufacture; and
h) The words *use no hooks* in capital letters.

NOTE

Attention is drawn to certification marking facilities offered by the Sri Lanka Standard Institution. See the inside back cover of the standard.

6 METHODS OF TEST

Tests shall be carried out as prescribed in SLS 645.

APPENDIX A
COMPLIANCE OF A LOT

The sampling scheme given in this appendix should be applied where compliance of a lot to the requirements of this standard is to be assessed based on statistical sampling and inspection.

Where compliance with this standard is to be assured based on manufacturer's control systems coupled with type testing and check tests or any other procedure, appropriate schemes of sampling and inspection should be adopted.

A.1 SCALE OF SAMPLING

A.1 The sampling shall be carried out as prescribed in SLS 559.

A.2 NUMBER OF TESTS

A.2.1 Each package selected as prescribed shall be inspected for packaging and marking requirements.

A.2.2 Tests for requirements specified in 4 shall be carried out on the composite sample prepared as in SLS 559.

A.3 CRITERIA FOR CONFORMITY

A lot shall be declared as conforming to the requirements of this specification, if the following conditions are satisfied.

A.3.1 Each package inspected as in A.2.1 satisfies the relevant requirements.

A.3.2 The test results on the composite sample when tested as in A.2.2 satisfy the relevant requirements.

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EXPLANATORY NOTE

The clause 4.2.2 specifies a tolerance of 5 per cent for all nutrient contents of fertilizer mixtures for coconut.

Since this clause does not clearly indicate that the tolerance of 5 per cent is of the specified nutrient content, it was decided to reword the clause 4.2.2.

Clause 3 of the standard specifies 5 types of fertilizer mixtures for coconut, namely, YPM 1, YPM 2, APM 1, APM 2 and APM 3.

Sulphate of Ammonia based mixtures are not recommended by the CRI and therefore YPM 2 and APM 2 are not recommended as fertilizer mixtures for coconut. Also the CRI does not recommend dolomite mixed fertilizers for young palms. Therefore clause 3, Table 1 and notes for Table 1 were amended.

AMD 246

AMENDMENT NO. 1 APPROVED ON 1999-08-19
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Clause 3 TYPES

Delete 3.1, 3.2, 3.3, 3.4, 3.5 and replace with the following :

3.1 YPM young palm mixture, urea based

3.2 APM adult palm mixture, urea based

3.3 ACM adult palm mixture without nitrogen

Clause 4.2.2

Delete the existing text and replace with the following :

"A tolerance limit of ± 5 per cent of the specified nutrient content shall be permitted for all nutrients".

Delete entirely the Table 1, foot notes of Table 1 and replace with the following :

TABLE 1 - Requirements for fertilizer mixtures for coconut

Sl. No.	Mixtures	Nutrient Content			
		N as N per cent by mass	P as P_2O_5 per cent by mass	K as K_2O, per cent by mass	Mg as MgO per cent by mass
(1)	(2)	(3)	(4)	(5)	(6)
(i)	YPM	13	12	17	-
(ii)	APM	12	06	32	-
(iii)	ACM	00	06	32	05

NOTES

1. *For APM and YPM, recommended Nitrogen source is urea, conforming to* ***SLS 613.***

2. *For YPM, recommended Phosphrous source is imported Rock Phosphate conforming to* ***SLS 748.***

3. *For APM and ACM, recommended Phosphorous source is 1 : 1 mixture of Eppawela Rock Phosphate and imported Rock Phosphate conforming to* ***SLS 748.***

4. *For all mixtures, the recommended Potassium source is Muriate of Potash (Potassium Chloride) conforming to* ***SLS 644.***

5. *For ACM recommended Magnesium source is Dolomite, conforming to* ***SLS 823.***

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The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

Further particulars of the terms and conditions of the permit may be obtained from the Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*

Printed at SLSI (Printing Unit)

SRI LANKA STANDARDS INSTITUTION

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The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

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