No.11-3/83-STU

Government of India

Ministry of Agriculture and Rural Development

(Department of Agriculture and Cooperation)

New Delhi, dated 25th September 1985

THE FERTILISER (CONTROL) ORDER 1985

ORDER

G.S.R. 758 (E). In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely

1. Short title and commencement

1. This Order may be called the Fertiliser (Control) Order, 1985.

2. Definitions

In this Order, unless the context otherwise requires:

(a) "Act" means the Essential Commodities Act, 1955 (10 of 1955).

(aa). Biofertiliser means the product containing carrier based (solid or liquid) living microorganisms which are agriculturally useful in terms of nitrogen fixation, phosphorus solubilisation or nutrient mobilization, to increase the productivity of the soil and/or crop/

a. "certificate of source" means a certificate given by a State Government, Commodity Board, manufacturer, + importer, pool handling agency or --as the case may be, wholesale dealer indicating therein the source from which fertiliser for purpose of sale is obtained.

b. "Commodity Board" means the Coffee Board constituted under section 4 of the Coffee Act, 1942 (7 of 1942) or the Rubber Board constituted under section 4 of the Rubber Act, 1947 (24 of 1947), or the Tea Board constituted under section 4 of the Tea Act, 1953 (29 of .1953), or as the case may be, the Cardamom Board constituted under section 4 of the Cardamom Act, 1965 (42 of 1965).

c. "compound or complex fertiliser" means a fertiliser containing two or more nutrients during the production of which chemical reaction takes place:---

d. "controller" means the person appointed as Controller of Fertilisers by the Central Government and includes any other person empowered by the Central Government to exercise or perform all or any of the powers, or as the case may be, functions of the Controller under this Order.

(ee) “Customised fertiliser” means the fertilizer specified under clause 20 B.;

e. "dealer" means a person carrying on the business of selling fertilisers whether wholesale or retail or industrial use* and includes a manufacturer, +Importer, and a pool handling agency carrying on such business and the agents of such person, manufacturer, +importer or pool handling agency.

f. Clause 'g' deleted vide S.O. 725 (E) dated 28.7.88.

g. "fer1i1iser" means any substance used or intended to be used as a fertiliser of the soil and/or crop and specified in Part A of Schedule I and includes a mixture of fertilizer and special mixture of ferti1isers provisional fertiliser ,customised fertilizer, Bio-fertilizers specified in Schedule III and Organic fertilizers specified in Schedule IV.

h. "Form" means a form appended to this Order.

i. "grade" means the nutrient element contents in the fertiliser expressed in percentage

j. "granulated mixture" means a mixture of fertilisers made by intimately mixing two or more fertilisers with or without inert material, and granulating them together, without involving any chemical reaction.

Kk "importer" means a person who imports fertiliser in accordane with the Exportand Import Policy of the Central Government, as amended from time to time.

k. "inspector" means an Inspector of Fertilisers appointed under clause 27.

ll "industrial dealer" means a dealer who sells fertilisers for industrial purposes.

lll "industrial purposes" means the use of fertiliser for purposes other than fertilisation of soil and Increasing productivity of crops.

l. "manufacturer" means a person who produces fertlllsers or mixtures of fertilisers and the expression "manufacture" with its grammatical variations shall be construed accordingly.

m. "mixture of fertilisers" ***means a mixture of fertllisers made by physical mixing two or more fertilisers with or without inert material in physical or granular form and includes a mixture of NPK fertilisers, a mixture of micronutrient fertilisers and a mixture of NPK with micronutrient fertilisers.

nn Notified Authority ”means an authority appointed under clause 26 A.

n. "offer for sale" includes a reference to an intimation by a person of a proposal by him for the sale of any fertiliser, made by publication of a price list, by exposing the fertilizer for sale indicating the price, by furnishing of a quotation or otherwise howsoever.

oo. Organic fertilizer means substances made up of one or more unprocessed materials of a biological nature (plant/animal) and may include unprocessed mineral materials that have been altered through microbiological decomposition process.

p ‘physical mixture" means a mixture of fertilisers made by physically mixing two or more fertilisers with or without inert material necessary to make a required grade, without involving any chemical reaction.

‘(pp) “Provisional fertilizer” means fertilizer specified under clause 20 A’.

q. "prescribed standard" means:-

i. in relation to a fertiliser included in column 1 of Part A of Schedule-I, the standard set out in the corresponding entry in column 2, subject to the limits of permissible variation as specified in Part B of that Schedule; and

ii. in relation to a mixture of fertilisers, the standard set out in respect of that mixture under sub-clause (1) of clause 13 by the Central Government, subject to the limits of permissible variation as

specified in Part B of Schedule-l

iii. in relation to mixture of fertilisers, standard set out in respect of that mixture under sub-clause (2) of clause 13 by the State Government, subject to limits of permissible variation as specified in Part B of Schedule-l.

iv. in relation to a Biofertiliser included in column 1 of Part A of Schedule-III, the standard set out in the corresponding entry in column 2, subject to the limits of permissible variation as specified in Part B of that Schedule;

v. in relation to a Organic fertiliser included in column 1 of Part A of Schedule-IV, the standard set out in the corresponding entry in column 2, subject to the limits of permissible variation as specified in Part B of that Schedule.

r. "pool handling agency" means an agency entrusted by the Central Government with functions relating to handling and distribution of imported fertilisers.

s. "registering authority" means a registering authority appointed under clause 26 in respect of mixture of fertilizers and special mixture of fertilizers

t. "retail dealer" means a dealer who sells fertilisers to farmers or plantations for **agricultural use such as for fertilisation of soil and increasing productivity of crops.

u. "Schedule" means a Schedule appended to this Order.

v. "special mixture of fertilisers" means any mixture of fertilisers prepared for experimental purposes in pursuance of a requisition made by any person (including a person engaged in the cultivation of tea, coffee or rubber) for sale to that person in such quantity and within such period as may be specified in such requisition; and.

w. "wholesale dealer" means a dealer who sells fertilisers otherwise than in retail-for agricultural use such as for fertilisation of soil and increasing productivity of crops.

II. PRICE CONTROL

3. Fixation of prices of fertilisers

1. The Central Government may, with a view to regulating equitable distribution of fertilisers and making fertilisers available at fair prices, by notification in the Official Gazette, fix the maximum prices or rates at which any fertiliser may be sold by a dealer, manufacturer, +importer or a pool handling agency.

2. The Central Government may having regard to the local conditions of any area, the period of storage of fertilisers and other relevant circumstances, fix different prices or rates for fertilisers having different periods of storage or for different areas or for different classes of consumers.

3. No dealer, manufacturer +importer or pool handling agency shall sell or offer for sale any fertiliser at a price exceeding the maximum price or rate fixed under this clause.

4. Display of stock position and price list of fertilisers

Every dealer, who makes or offers to make a retail sale of any fertilisers, shall prominently display in his place of business:-

a. the quantities of opening stock of different fertilisers held by him on each day;

Explanation -The actual stocks at any point of time during the day may be different from that of the displayed opening stocks to the extent of sale and receipt of such fertilisers upto the time of inspection during that day

b. a list of prices or rates of such fertilisers fixed under clause 3 and for the time being in force.

5. Issue of cash/credit memorandum

a. Every dealer shall issue a cash or credit memorandum to a purchaser of a fertiliser in Form M*

III. CONTROL ON DISTRIBUTION OF FERTILISERS BY MANUFACTURER/ IMPORTER

6. Allocation of fertilisers to various States

The Central Government may, with a view to securing equitable distribution and availability of fertilisers to the farmers in time, by notification in the Official Gazette, direct any manufacturer/importer to sell the fertilisers produced by him in such quantities and In such State or States and within such period as may be specified in the said notification.

IV. AUTHORISATION OR REGISTRATION OF DEALERS"

7. Registration of Industrial dealers and authorization of other dealers

No person shall sell, offer for sale or carry on the business of selling of fertilizer at any place as wholesale dealer or retail dealer except under and in accordance with clause8:Provided that a State Government may, if it considers it necessary or expedient, by notification in the Official Gazette, exempt from the provisions of this clause any person selling fertilizer to farmers in such areas and subject to such conditions as may be specified in that notification."

8. Application for intimation or registration

1. Every person intending to sell or offer for sale or carrying on the business of selling of fertilizer as Industrial Dealer shall obtain a certificate of registration from the controller by making an application in Form A together with the fee prescribed under clause 36 and a Certificate of

source in Form O.

2. Every person including a manufacturer, an importer, a pool handling agency, wholesaler and a retail dealer intending to sell or offer for sale or carrying on the business of selling of fertilizer shall make a Memorandum of Intimation to the Notified Authority, in Form A1 duly filled in, in duplicate, together with the fee prescribed under clause 36 and certificate of source

in Form O.

3. On receipt of a Memorandum of Intimation, complete in all respects, the Notified Authority shall issue an acknowledgement of receipt in Form A2 and it shall be deemed to be an authorization letter granted and the concerned person as authorised dealer for the purposes of this Order.

Provided that a certificate of registration granted before the commencement of the Fertiliser (Control) Amendment Order, 2003, shall be deemed to be an authorization letter granted under the provisions of this Order:

Provided further that where the applicant is a State Government, a manufacturer or an importer or a pool-handling agency, it shall not be necessary for it or him to submit Form O.

Provided also that a separate Memorandum of Intimation shall be submitted by an applicant for whole sale business or retail dealership, as the case may be:

Provided also that where fertilizers are obtained for sale from different sources,a certificate of source from each such source shall be furnished in Form O."

9. Grant or refusal of certificate of registration

The Controller, shall grant a certificate of registration in Form 'B' within thirty days of the receipt of application to any person who applies for it under clause 8;

Provided that no certificate of registration shall be granted to a person: -

a. if his previous certificate of registration is under suspension; or

b. if his previous certificate of registration has been cancelled within a period of one year immediately preceding the date of application; or

c. if he has been convicted of an offence under the Act, or any Order made there under within three years immediately preceding the date of making the.

d. if he fails to enclose with the application a certificate of source ; or

e. if the application is incomplete in any respect; or

f. if he makes an application for obtaining the certificate of registration for industrial dealer and, excepting if he is a manufacturer ,+ importer or pool handling agency, holds [an authorization letter] for wholesale dealer or retail dealer or both, and as the case may be, the vice-versa.

10. Period of validity of certificate of registration and letter of authorization

Every certificate of registration granted under clause 9 and every authorization letter issued under clause 8 shall, unless renewed, suspended or cancelled, be valid for a period of three years from the date of its issue.

11. Renewal of certificates of registration and authorization letters

1. Every holder of a certificate of registration granted under clause 9 or authorization letter granted or deemed to have been granted under clause 8, desiring to renew such certificate or authorization letter shall, before the date of expiry of such certificate of registration or authorization letter, as the case may be, make an application for renewal to the Controller, in

Form C, or to the Notified Authority in Form A1, respectively, in duplicate, together with the fee prescribed under clause 36 for such renewal and a certificate of source as required under clause 8.

2. On receipt of an application under sub-clause (1), together with such fee and certificate of source, the controller may renew the certificate of registration or the Notified Authority, as the case may be shall issue acknowledgement receipt of renewal in form A 2. Provided that a certificate of registration shall not be renewed if the holder of the same did not sell any fertiliser during the period of one year immediately preceding the date of expiry of the period of validity.

3. If any application for renewal is not made before the expiry of the period of validity of the certificate of registration or, as the case may be, the authorization letter but is made within one month from the date of such expiry, the certificate of registration or, as the case may be, the authorization letter shall be dealt as provided in sub-clause (2) on payment of such additional fee as may be prescribed under clause 36 in addition to the fee for renewal.

4. Where the application for renewal of certificate of registration is made within the time specified in sub- clause (1) or sub-clause (3), the applicant shall be deemed to have held a valid certificate of registration until such date as the controller passes orders on the application for renewal.

5. If an application for renewal of a certificate of registration or authorization letter is not made within one month from the date of expiry of their period of validity ,the same shall be deemed to have lapsed on the date on which its validity expired and any business carried on after that date shall be deemed to have been carried on in contravention of clause 7."

V. MANUFACTURE OF MIXTURES OF FERTILIZERS, ORGANIC FERTILISER AND BIO- FERTILISER

12. Restriction on preparation of mixtures of fertilizer

No person shall carry on the business of preparing any mixture of fertilisers. or special mixture of fertilizers, Bio-fertilizers or Organic fertilisers except under and in accordance with the terms and conditions of a certificate of manufacture granted to him under clauses 15 or 16.

13. Standards of mixtures of Fertilisers

1. Subject to the other provisions of the order

(a) no person shall manufacture any *mixture of fertilisers whether of solid or liquid fertilizers specified in Part a of schedule I unless such mixture conforms to the standards set out in the notification to be issued by the Central Government in the Official Gazette;

(b) no person shall manufacture any biofertiliser unlessl such biofertiliser conforms to the standards set out in the part A of Schedule – III.

(c) no person shall manufacture any Organic fertilizer unless such organic fertilizer conforms to the standards set out in the part A of Schedule IV.

2. Subject to the other provisions of this order, no person shall manufacture any "mixture of fertilisers unless such mixture conforms to the standards set out in the notification to

be issued by the State Government in the Official Gazette; Explanation- For the purposes of this sub-clause, mixture of fertilizers shall not include liquid fertilizers and 100% water soluble fertilizers, containing N,P,K.

3. [omitted]

4. No Certificate of manufacture shall be granted in respect of any fertiliser which does not conform to the standards set out in the notification referred

in sub- clause (1) or (2);

5. Nothing in this clause shall apply to special mixtures of fertilisers

14. Application for certificate of manufacture of mixtures of fertillsers

1. Every person desiring to obtain a certificate of manufacture for preparation of any mixture of fertilisers or special mixture of fertilisers shall possess such mixture, *and possess the minimum laboratory facility as specified in clause 21A of this Order.

2. An applicant for a certificate of manufacture for preparation of mixture of fertilisers or special mixture of fertilisers shall make an application to the registering authority

a. if he is an applicant for a certificate of manufacture for any mixture of fertilisers in Form D, in duplicate, together with the fee prescribed

there for under clause 36; or,

b. if he is an applicant for a certificate of manufacture for any special mixture, in Form E, in duplicate, together with the fee prescribed there for under the said clause 36 and an attested copy of the requisition of the purchaser.

3. Every person desiring to obtain a Certificate of Manufacture for preparation or organic fertilizer or biofertiliser shall make an application in Form D, in duplicate, together with a fee prescribed therefore under clause 36, to Registering authority.

15. Grant or refusal of certificate of manufacture for preparation of mixtures of fertilizers, Biofertilisers or Organic fertilizer.

1. On receipt of an application under clause 14, the registering authority shall, by order in writing, either grant or refuse to grant the certificate of manufacture in respect of any mixture of fertilizer, Biofertiliser, Organic fertiliser or special mixture of fertilizer and shall, within forty-five days from the date of receipt of the application, furnish to the applicant a copy of the order so passed;

2. Where an application for a certificate of manufacture for mixture of fertilizers, Biofertiliser, Organic fertiliser is not refused under sub-clause (1), the registering authority shall grant a certificate of manufacture in Form F and where an application for a certificate of manufacture for a special mixture is not refused under that sub-clause, *[such authority shall within forty five dates from the date of receipt of the application,]grant a certificate of manufacture to the applicant in Form G

16. Conditions for grant of certificate of manufacture in respect of special mixture of fertilisers and period of validity of such certificate

1. No certificate of manufacture in respect of any special mixture of fertilisers shall be granted to an applicant unless he holds a valid certificate of

manufacture under this Order for any mixture of fertilisers.

2. Every certificate of manufacture granted in respect of any special mixture of fertilisers shall be valid for a period of [sixmonths] from the date of its issue; Provided that the

registering authority may, if it is satisfied that it is necessary so to do, extend the said period to such further period or periods as it may deem fit, so however, that the total period or periods so extended shall not exceed [twelve months]

17. Period of validity of a certificate of manufacture for preparation of mixtures of fertilizers, Biofertilisers or Organic fertilizer.

Every certificate of manufacture granted under clause 15 for preparation of a mixture of fertilizers, Biofertiliser or Organic fertilizers shall, unless suspended or cancelled, be valid for a period of three years from the date of issue.

18. Renewal of certificate of manufacture for preparation of mixtures of fertilizers, Biofertiliser or Organic fertiliser

1. Every holder of a certificate of manufacture for preparation of a mixture of fertilizers, Biofertiliser, Organic fertiliser desiring to renew the certificate, shall, before the date of expiry of the said certificate of manufacture make an application to the registering authority in

Form D in duplicate, together with the fee prescribed for this purpose under clause 36.

2. On receipt of an application for renewal as provided in sub-clause (1), and keeping in view the performance of the applicant and other relevant circum- stances, the registering authority may, if he so decides, renew the [certificate of manufacture by endorsement on Form F and in case the certificate of registration is not renewed, the registering authority shall record in writing his reasons for not renewing the certificate of manufacture.

3. If an application for renewal is not made before the expiry of the certificate of manufacture but is made within one month from the date of expiry of the [certificate of manufacture, the certificate of manufacture] may be renewed on payment of such additional fee as may be prescribed by the State Government for this purpose.

4. Where the application for renewal is made within the time specified in sub- clause (1) or sub-clause (3), the applicant shall be deemed to have held a valid [certificate of manufacture] until such date as the registering authority passes order on the application for renewal.

5. f an application for renewal of a certificate of manufacture is not made within the period stipulated under sub-clause (1) or, as the case may be, under sub-clause (3), the certificate of manufacture shall be deemed to have expired immediately on the expiry of its validity period, and any business carried on after that date shall be deemed to have been carried on in contravention of clause 12.

VI. RESTRICTIONS ON MANUFACTURE/ IMPORT, SALE, ETC. OF FERTILISER

19. Restriction on manufacture/import, sale and distribution of fertilisers

No person shall himself or by any other person on his behalf:-

a. manufacture/import for sale, sell, offer for sale, stock or exhibit for sale or distribute any fertlliser which Is not of prescribed standard;

b. manufacture/Import for sale, sell, offer for sale, stock or exhibit for sale, or distribute any mixture of fertl11sers, which is not of prescribed standard** (subject to such limits of permissible variation as may be specified from time to time by the Central Government) or special mixture of fertilisers which does not conform to the particulars specified In the certificate of manufacture granted to him under this Order in respect of such special mixture.

c. sell, offer for sale, stock or exhibit for sale or distribute:-

i. any fertiliser the container whereof is not packed and marked in the manner laid down In this Order

ii. any fertiliser which is an [imitation of or] a substitute for another fertiliser under the name of which It Is sold;

iii. any fertiliser which Is adulterated;

Explanation:- A fertiliser shall be deemed to be adulterated, If It contains any substance the addition of which is likely to eliminate or decrease Its nutrient contents or make the fertiliser not conforming to

the prescribed standard.

iv. any fertiliser the label or container whereof bears the name of any individual firm or company purporting to be manufacturer/Importer of the fertiliser, which individual, firm or company Is fictitious or does not exsist.

v. any fertiliser, the label or container whereof or anything accompanying therewith bears any statement which makes a false claim for the fertiliser of which s false or misleading in any material particular.

vi. any substance as a fertiliser which substance is not, in fact, a fertiliser; or

vii. any fertiliserwithout exhibiting the minimum guaranteed percentage by weight of plant nutrient.

20. Specifications In respect of imported fertilisers

Notwithstanding anything contained in this Order, the Central Government may by an order, published in the Official Gazette, fix separate specifications in respect of imported fertilisers.

20 A. Specification in respect of provisional fertilizer

Notwithstanding anything contained in this Order, the Central Government may, by order published in the Official Gazette, notify specifications, valid for a period not exceeding three years, in respect of fertilizers to be manufactured by any manufacturing unit for conducting commercial trials.

20 B.- Specifications in respect of customized fertilizers. - Notwithstanding anything contained in this Order, the Central Government may by order published in the Official Gazette, notify specification, valid for a period not exceeding three years in respect of customized fertiliser to be manufactured by any manufacturing unit".

21. Manufacturers/Importers pool handling agencies to comply with certain requirements in regard to packing and marking, etc.2

every manufacturer/importer and pool handling agency shall, in regard to packing and marking of containers of fertilisers, Biofertiliser or Organic fertiliser comply with the following requirements, namely:-

a. Every container in which any fertiliser is packed shall conspicuously be superscribed with the word "FERTILISER" and shall bear only such particulars and unless otherwise required under any law nothing else, as may from time to time, be specified by the Controller in this behalf, and;]

(aa) Every container in which any Biofertiliser or Organic fertilizer is packed shall conspicuously be superscribed with the word "BIO-FERTILISER/ ORGANIC FERTILISER" and shall bear only such particulars and unless otherwise required under any law nothing else, as may from time to time, be specified by the Controller in this behalf,

Provided that in case of containers the gross weight of which is 5 kg or less, no such printing of superscription and other particular shall be necessary if such super superscription and other particulars are printed on a separate label which is securely affixed to such container.

(b) Every container shall be so packed and sealed that the contents thereof cannot be tampered with without breaking the seal;

Provided that where fertilizer manufactured in India are packed in bags stitched on hand, such bags shall bear lead seals, so that the contents thereof cannot be tampered with without breaking the seals;

Provided further that lead sealing shall not be necessary:-

(i) if such bags are machine stitched in such a manner that contents thereof cannot be tampered with without a visible break in the stitching; and

(ii) in the case of fertilizers imported from abroad and packed a in bags stitched in hand, in such a manner that the contents thereof cannot be tampered with without visible break in the stitching.

Provided also that in case fertilizer bags are in cut, torn or damaged condition during transportation or mishandling during loading or unloading operation, the manufacturer of such fertilizer may, under intimation to the State Government and the Central Government, repack he fertilizer in new bags or

restandardise the quantity in terms of declared weight.

c. Every fertiliser bag in which any fertiliser is packed for sale shall be of such weight and size as may be specified by the Central Government from time to time in this behalf

21 A. Manufacturers to comply with certain requirements for laboratory facilities:-

Every manufacturer shall, in order to ensure quality of their product, possess minimum laboratory facility, as may be specified from time to time by the Controller.

22. Bulk sale of fertillsers

Notwithstanding anything contained In this Order:-

a. a retail dealer may retain at any time one bag or container of each variety of fertiliser in an open and unsealed condition for the purpose of sale;

b. a manufacturer/importermay sell the fertillser manufactured/imported by him in bulk to a manufacturer of mixture of fertilisers, compound / complex fertilisers or special mixture of fertilisers; and

c. the Central Government may by notification published in the Official Gazette in this behalf authorise a manufacturer/importer to sell any fertiliser manufactured/ imported by him In bulk also direct to farmers for such period as may be specified in that notification:Provided that a certificate indicating the minimum guaranteed percentage of plant nutrients is issued by the manufacturer/importer to each farmer at the time of such sale.

23. Disposal of non-standard fertilisers

1. Notwithstanding anything contained In this Order, a person may sell, offer for sale, stock or exhibit for sale or distribute, [any fertillser except any fertillser imported by the Central Government] which, not being an adulterated fertiliser, does not conform to the prescribed standard (hereinafter in this Order referred to as non-standard fertiliser) subject to the conditions that:-

   a. the container of such non-standard fertilizer is conspicuously superscribed in red colour with the words "non-standard" and also with the sign "X"; and

   b. an application forthe disposal of non-standard fertilisers in Form H is submitted to the [Notified authority] to grant a certificate of authorisation for sale of such fertilisers and a certificate of authorisation with regard

to their disposal and price is obtained in Form I.

c. such non-standard fertiliser shall be sold only to the manufacturers of mixtures of fertilisers or special mixtures of fertilisers or research farms of Government or Universities or such bodies.

2. The price per unit of the non-standard fertiliser shall be fixed by the [notified authority] after satisfying itself that the sample taken is a representative one, and after considering the nutrient contents in the sample determined on the basis of a chemical analysis of the non-standard fertilizer.

3. The Central Government may, by notification in the official Gazette and subject to the conditions, if any, laid down in that notification, and subject to guidelines issued in this regard by the Central Government exempt such pool handling agencies, as it deems fit, from complying with conditions laid down in paragraphs (a) and (b) of the sub-clause (1)

4. Where any fertiliser imported by the Central Government is found to be of non-standard and the Central Government decides that the fertilizer cannot be permitted for direct use in agriculture, it may permit the use of such fertiliser by manufacturers of complex fertilisers, mixture of fertilisers or special mixture of fertilisers to be sold at such price as may be fixed by

the Central Government.

5. If a manufacture or importer detects or as reasonable doubt about the standard of the fertilizer manufactured or imported by him, and dispatched for sale as deteriorated in quality during transit due to natural calamity and is not of the prescribed standards, he may, within fifteen days from the date of dispatch from factory or port, apply with detailed justifications to the Central Government for obtaining permission for reprocessing the same in a factory to meet the prescribed standards and the Central Government may, after considering the facts, permit the re-processing of such fertilizer on the terms and conditions as may be notified by the Central Government in this behalf.

Provided that no such application for permission to reprocess the fertilizer by the manufacturer or importer shall be accepted by the Central Government after the expiry of the said period of fifteen days.

24. Manufacturers/Pool handling agencies to appoint officers responsible with compliance of the Order

Every manufacturing organization, ***importer and pool handling agency shall appoint in that organization and in consultation with the Central Government,

an officer, who shall be responsible for compliance with the provisions of this Order .

25. Restriction on sale/use of fertilisers

1. No person shall, except with the prior permission of the Central Government and subject to such terms and conditions as may be imposed by such Government, sell or use fertiliser, for purposes other than fertilisation of soils and increasing productivity of crops.

Provided that the price of fertilisers permitted for sale for industrial use shall be no profit no loss price, excluding all subsidies at the production, import, handling or on sale for agricultural consumers;

Provided further that wherever customs or excise duties are chargeable, these may be added to the price so fixed.

Provided also that in the case of non-standard fertilisers, reductions shall be made from the no profit no loss price, indicated above, proportionate to the loss of nutrient contents.

2. Notwithstanding anything contained in sub-clause (1), no prior permission for use of fertiliser for industrial purposes shall be necessary when the fertiliser for such purposes is purchased from the Industrial dealer possessing a valid certificate of registration granted under clause 9.

3. Any person possessing a valid certificate of registration for Industrial dealer, unless such person is a State Government, a manufacturer/importer or a pool handling agency, shall not carry on the business of selling fertilisers foragricultural purposes, including a wholesale dealer or a retail dealer. However, in case of a State Government, a manufacturer or a importer or a pool handling agency possessing a valid certificate of registration for sale of fertiliser for industrial use, and also for sale of fertiliser for agricultural use, whether in wholesale or retail or both, shall not carryon the business of selling fertilisers both for Industrial use and agricultural use In the same premises.

VII. ENFORCEMENT AUTHORITIES

26. Appointment of registering authority The State Government may, by notification in the Official Gazette, appoint such number of persons, as it thinks necessary, to be registering authorities for the purpose of this Order [$]for industrial dealers, and may, in any such notification define the limits of local area within which each such registering authority shall exercise his jurisdiction.

26A. Notified Authority- The State Government may, by notification in the Official Gazette, appoint such number of persons, as it thinks necessary, to be Notified Authorities for the purpose of this Order and define the local limits within which each such Notified Authority shall exercise his jurisdiction.

27. Appointment of inspectors

The State Government, or the Central Government may, by notification in the Official Gazette appoint such number of persons, as it thinks necessary, to be inspectors of fertilisers for the purpose of this Order, and may, in any such notification, define the limits of local area within which each such inspector shall exercise his jurisdictions.

27A. Qualifications for appointment of fertiliser Inspectors

No person shall be eligible for appointment as Fertiliser Inspector under this Order unless he possesses the following qualifications, namely:-

1. Graduate In agriculture or science with chemistry as one of the subjects, froma recognlsed university; and

2. Training or experience in the quality control of fertilisers and working in the State or Central Government Department of Agriculture.

27B. **Qualifications for appointment of fertiliser Inspectors for Biofertiliser and Organic Fertiliser.**

No person shall be eligible for appointment as inspector of biofertiliser and Organic fertilizer under this Order unless he may possess the following qualifications, namely:

(1) Graduate in agriculture or science with chemistry/microbiology as one of the subject; and

(2) Training or experience in the field of quality control of biofertilisers/organic fertilizers.

28. Powers of Inspectors

1. An inspector may, with a view to securing compliance with this Order:-

a. require any manufacturer, +importer, pool handling agency, wholesale dealer or retail dealer to give any information in his possession with respect to the manufacture, storage and disposal of any fertilizer

manufactured or, in any manner handled by him

b. draw samples of any fertiliser in accordance with the procedure of drawal of samples laid down in Schedule II. Provided that the inspector shall prepare the sampling details in duplicate In Form J, and hand over

one copy of the same to the dealer or his representative from whom the sample has been drawn;

(ba) draw samples of any biofertilisers in accordance with the procedure of drawl of samples laid down in schedule III.

(bb) draw samples of any organic fertilisers in accordance with the procedure of drawl of samples laid down in schedule IV.

c. enter upon and search any premises where any fertiliser is manufactured/ Imported or stored or exhibited for sale, if he has reason

to believe that any fertiliser has been or is being manufactured/imported, sold, offered for sale, stored, exhibited for sale or distributed contrary to the provisions of this Order;

d. seize or detain any fertiliser in respect of which he has reason to believe that a contravention of this Order has been or is being or is [attempted] to be committed;

e. seize any books of accounts or documents relating to manufacture, storage or sale of fertilisers, etc. in respect of which he has reason to believe that any contravention of this Order has been or is being or is about to be committed;

Provided that the Inspector shall give a receipt for such fertilisers or books of accounts or documents so seized to the person from whom the same have been seized;

Provided further that the books of accounts or documents so seized shall be returned to the person from whom they were seized after copies thereof or extracts thereform as certified by such person, have been taken.

2. Subject to the proviso to paragraphs (d) and (e) of sub-clause (1), the provisions of the Code of Criminal Procedure, 1973 (2 of 1974) relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

Provided also that the inspector shall give the stop sale notice in writing to the person whose stocks have been detained and initiate appropriate action as per the provisions of this order within a period of twenty one days. If no action has been initiated by the inspector within the said period of twenty one days from the date of issue of the said notice, the notice of stop sale shall be

deemed to have been revoked.

3. Where any fertiliser is seized by an inspector under this clause, he shall forthwith report the fact of such seizure to the collector whereupon the provisions of sections 6A, 6B, 6C, 6D and 6E of the Act, shall apply to the custody, disposal and confiscation of such fertilisers.

4. Every person, if so required by an inspector, shall be bound to afford all necessary facilities to him for the purpose of enabling him to exercise his powers under sub-clause (1).

VIII. ANALYSIS OF SAMPLES

29. Laboratory for analysis

1. A fertiliser samples, drawn by an inspector, shall be analyzed in accordance with the instructions contained in Schedule II in the -Central Fertiliser Quality Control and Training Institute, **Faridabad or Regional Fertiliser Control Laboratories at Bombay, Madras or Kalyani (Calcutta) or in any other laboratory notified for this purpose by the State Government [with the prior approval of the Central Government.

(1A) Biofertiliser samples, drawn by an inspector, shall be analyzed in accordance with the instructions contained in Schedule III in the –National Centres of Organic Farming, Ghaziabad or Regional Centres of Organic Farming at Bangalore, Bhubaneshwar, Hissar, Imphal, Jabalpur and Nagpur or in any other laboratory notified by the Central or State Government.

(1B) Organic fertiliser samples, drawn by an inspector, shall be analyzed in accordance with the instructions contained in Schedule IV in the –National Centres of Organic Farming, Ghaziabad or Regional Centres of Organic Farming at Bangalore, Bhubaneshwar, Hissar, Imphal, Jabalpur and Nagpur or in any other laboratory notified by the Central or State Government.

2. Every laboratory referred to in sub-clause (1) shall, in order to ensure accurate analysis, of fertiliser samples, possess minimum equipment and other laboratory facilities, as may be specified from time to time by the Controller in this behalf

29A. Qualifications for appointment of fertiliser analyst in the ferti1ser control laboratories

No person shall be eligible for appointment as fertiliser analyst for analysis of fertiliser samples in the laboratories notified under clause 29 of the Order, unless he possesses the following qualifications, namely:-

1. graduate in Agriculture or Science with chemistry as one of the subjects from a recognised university; and

2. training In fertiliser quality control and analysis at Central Fertlllzer Quality Control and Training Institute, Faridabad.

Provided that the fertiliser analysts appointed before the commencement of this Order, who do not possess the requisite training, shall undergo prescribed training, within a period of three years, in the Central Fertiliser Quality Control " and Training Institute, Faridabad from the date of commencement of this Order.

29B Laboratories for refree analysis

1. Every laboratory referred to in sub-clause (1) of clause 29 shall be designated as referee laboratory for the purpose of analysis of any sample of fertiliser :

Provided that no such laboratory which carried out the first analysis of the fertiliser sample shall be so designated in respect of that sample:

Provided further that in respect of any sample the analysis of which has been challenged, may be sent for referee analysis to any one of the other laboratories except those which are located in the State or where the first analysis has been done.

Provided also that the Central Fertiliser Quality Control and Training Institute and Regional laboratories shall be considered as one group of laboratories and a sample first analysed by any one of them, shall not be sent for referee analysis to any other in that group, but only to any other laboratory notified by

a State Government.

2. Not with standing anything contained in this Order, the Appellate Authority as specified under paragraph (b) of sub-clause (1) or paragraph (b) of sub-clause(2) of clause 32, in case of sample analyzed by the State Government laboratory, or the Controller, in case of samples analyzed by Central Fertiliser Quality Control and Training Institute, Faridabad or its Regional Fertiliser Control Laboratories, as the case may be, shall decide and send, one of the two remaining samples, for reference analysis as provided under sub-clause (1).

30. TIme lImit for analysis, and communication of result

1. Where sample of a fertlliser has been drawn, the same shall be dispatched alongwith a memorandum in Form K and in case of Organic fertilizers and Biofertilisers in Form KI to the laboratory for analysis within

a period of seven days from the date of Its drawal.

Form L and in case of Organic fertilizer and Biofertiliser in Form LI within [30 days] from the date of receipt of the sample in the laboratory to the authority specified in the said memorandum.

3. The authority to whom the analysis report is sent under sub-clause (2) shall communicate the result of the analysis to the dealer/manufacturer/Importer/pool handling agency from whom the sample was drawn within [15 days] from the date of receipt of the analysis report of the laboratory.

IX. MISCELLANEOUS

31 Suspension, Cancellation Or Debarment

1. A Notified Authority, registering authority, or as the case may be, the controller may, after giving the authorized dealer or the holder of certificate of registration or certificate of manufacture or any other certificate granted under this Order, an opportunity of being heard, suspend such authorization letter or certificate or debar the dealer from carrying on the business of fertilizer on one or more of the following grounds, namely:-

   a. that the authorization letter or certificate of registration or certificate of manufacture, as the case may be, has been obtained by wilful suppression of material facts or by misrepresentation of relevant particulars:

   b. that any of the provisions of this Order or any terms and condition of the Memorandum of Intimation or certificate of registration or the certificate of manufacture, as the case may be, has been contravened or not fulfilled:

   Provided that while debarring from carrying on the business of fertiliser or canceling the certificate, the dealer or the certificate holder thereof may be allowed for a period of thirty days to dispose of the balance stock of fertilizers, if any, held by him:

   Provided further that the stock of fertilizer lying with the dealer after the expiry of the said period of thirty days shall be confiscated.

2. Where the contravention alleged to have been committed by a person is such as would, on being proved, justify his debarment from carrying on the business of selling of fertilizer or, cancellation of authorization letter or certificate of registration or certificate of manufacture or any other certificate granted under this Order to such person the Notified Authority or registering authority or, as the case may be, the controller may, without any notice, suspend such certificate, authorization letter, as an interim measure:

Provided that the registering authority, Notified Authority or, as the case may be, the controller shall immediately furnish to the affected person details and the nature of contravention alleged to have been committed by such person and, after giving him an opportunity of being heard, pass final orders either revoking the order of suspension or debarment within fifteen days from the date of issue of the order of suspension:

Provided further that where no final order is passed within the period as specified above, the order of interim suspension shall be deemed to have been revoked without prejudice, however, to any further action which the registering authority, Notified Authority or, as the case may be, the controller may take against the affected person under sub-clause (1).

3. Wherever an authorization letter or certificate is suspended, cancelled or the person is debarred from carrying on the business of fertiliser, the Notified Authority, registering authority, or as the case may be, the Controller shall record a brief statement of the reasons for such suspension or, as the case may be, cancellation or debarment and furnish a copy thereof to the person whose certificate or authorization letter has been suspended or cancelled or business has been debarred.

4. Wherever the person alleged to have committed the contravention is an industrial dealer, the Notified Authority may take action against the holder of such certificate of registration under sub-clause (1) and sub-clause (2):

Provided that where such certificate is suspended or cancelled, the Notified Authority shall, within a period of fifteen days from the date of issue of such order of suspension or cancellation, furnish to the controller also, besides sending the same to the person whose certificate has been suspended or cancelled, a detailed report about the nature of contravention committed and a brief statement of the reasons for such suspension or, as the case may be, cancellation:

Provided further that the controller, shall, in case of the order for suspension passed by the Notified Authority, on receipt of the detailed report and after giving the person an opportunity of being heard, pass final order either revoking the order of suspension or canceling the certificate of registration, within fifteen days from the date of receipt of the detailed report from the Notified Authority, failing which the order of interim suspension passed by the Notified Authority shall be deemed to have been revoked, without prejudice however, to further action which the controller may take against the holder of certificate under sub-clause (1):

Provided also that the order of cancellation passed by the Notified Authority shall remain effective as if it had been passed by the controller till such time the Controller, on receipt of the detailed report from the Notified Authority, and if deemed necessary, after giving the person a fresh opportunity of being heard, pass the final order either revoking or confirming the order of cancellation.

32. Appeals at Central Government level

1. In any State, where the fertiliser allocation is made by the Central Government under this Order and if the suspension or cancellation of authorization letter of the manufacturer and or pool handling agency or debarment of business, in any way, has an effect of dislocating the said allocation and if the Central Government is of the opinion that it is necessary or expedient so to do for maintaining the supplies, may direct the concerned State Government to furnish detailed report about the nature of contravention and a brief statement of the reasons for such suspension or cancellation and pass such order as it may think fit, confirming, modifying or annulling the order of State Government

Provided that if the report called by the Central Government is not received from the State Government within a period of fifteen days from the date of issue of the communication, the Central Government may decide the case without the report, on merit.

2. Any person aggrieved by the analysis report of Central Fertiliser Quality Control and Training Institute or its regional laboratories may appeal to the Controller for referee analysis of such sample within a period of 30 days from the receipt of analysis report.

Provided that the Controller may entertain an appeal after the expiry of said period of 30 days from the date of the order appealed.

32A. Appeal at the State Government level

1. The State Government shall, by notification in the Official Gazette, specify such authority as the Appellate authority before whom the appeals may be filed within 30 days from the date of the order appealed against by any person, except by an industrial dealer, aggrieved by any of the following Orders or action of registering authority or a Notified Authority, namely:-

i. Refusing to grant a certificate of manufacture for preparation of mixture of fertilisers or special mixture of fertilizers; or

ii. Suspending or canceling a certificate of manufacture; or

iii. Suspending or canceling authorization letter or debarring from carrying on the business of selling of fertilizer, or

iv. non-issuance of certificate of manufacture within the stipulated period; or

v. non-issuance of amendment in authorization letter within the stipulated period.

2. Any person aggrieved by analysis report of fertilizer Testing laboratories notified by the State Government may appeal to the appellate authority appointed under sub-clause (1) for reference analysis of such sample within thirty days from the date of receipt of analysis report.

33. Grant of duplicate copies of [authorization letter or Certificate of manufacture] certificate of registrations, etc.

Where [authorization letter or] a certificate of registration or a certificate of manufacture or any other certificate granted or, as the case may be, renewed under this Order is lost or [defaced, the notified authority]registering authority **or, as the case may be, the Controller may, on an_application made in this behalf, together with the fee prescribed for this purpose under clause 36, grant a duplicate copy of such certificate.

34. Amendment of certificate of registration

The Notified Authority, registering or controller, as the case may be, may, on application being made by the holder of an authorization letter, a certificate of registration or certificate of manufacture, together with the fee prescribed for the purpose under clause 36, amend an entry in such authorization letter, certificate of registration or certificate of manufacture as the case may be.

35. Maintenance of records and submission of returns, etc.

1. The controller may by an order made in writing direct the dealers. manufacturers/ importers, and pool handling agencies:-

a. to maintain such books of accounts, records, etc. relating to their business in Form 'N'. and

b. to submit to such authority, returns and statements in such form and containing such information relating to their business and within such time as may be specified in that order.

2. Where a person holds certificates of registration for retail sale and wholesale sale of fertilisers, he shall maintain separate books of accounts for these two types of sales made by him.

3. Where a State Government, a manufacturer, +an importer and a pool handling agency holds valid certificates of registration for sale of fertilisers in, wholesale or retail or both and also for sale for industrial use, he shall maintain separate books of accounts for these two or three types of sales made by him.

4. Every importer shall inform the Director of Agriculture of the State in which he intends to discharge the imported fertilizer, under intimation to the Central Government, before the import is made orwithin a period of fifteen days after an indent for import is placed, the following details, namely ;-

i. name of fertiliser

ii. name of country of import.

iii. name of manufacturer.

iv. quantity to be imported

v. date of arrival of the consignment.

vi. name of the discharge port.

vii. other information

36. Fees

1. The fees payable for grant, amendment or renewal of a[n authorization letter] or certificate of registration or certificate of manufacture a duplicate of such certificates or, renewal thereof under this Order shall be such as the State Government may, from time to time fix, subject to the maximum fees fixed for different purposes by the Central Government and different fees may be fixed for different purposes or for different classes of dealers or for different types of mixtures of fertiliser or special mixture.

2. The authority to whom and the manner in which the fee fixed under sub-clause (1) shall be paid, shall be such as may be specified by the State

3. Any fee paid under sub-clause (1) shall not be refundable unless the grant or renewal of any certificate of registration or certificate of manufacture or duplicate copy of such certificate or renewal under this Order has been refused.

4. The fees payable for grant, amendment, renewal or duplicate copy of certificate of registration for industrial dealer and the authority to whom and the manner in which such fee shall be paid, shall be such as may be specified by the Controller from time to time by notification in the Official Gazette*.

37. Service of orders and directions

Any order or direction made or issued by the controller or by any other authority under this order shall be served in the same manner as provided in sub-section (5) of section 3 of the Act.

38. Advisory Committee

1. The Central Government may by notification in the Official Gazette and on such terms and conditions as may be specified in such notification, constitute a Committee called the Central Fertiliser Committee consisting of a Chairman and not more than ten other persons having experience or knowledge in the field, who shall be members of the Committee, to advise the Central Government regarding:-

i. inclusion of a new fertiliser, under this Order;

ii. specifications of various fertilisers;

iii. grades/formulations of physical/granulated mixtures of fertilisers that can be allowed to be prepared in a State;

iv. requirements of laboratory facilities in a manufacturing unit, including a unit manufacturing physical/granulated mixtures of fertilisers;

v. methods of drawal and analysis of samples.

vi. any other matter referred by the Central Government to the Committee.

2. The Committee may, subject to the previous approval of the Central Government, make bye-laws fixing the quorum and regulating its own procedure and the conduct of all business to be transacted by it.

3. The Committee may co-opt such number of experts and for such purposes or periods as it may deem fit, but any expert so co-opted shall not have the right to vote.

4. The Committee may appoint one or more sub-committees, consisting wholly of members of the Committee or or partly of the members of the Committee and partly of co-opted members as it thinks fit, for the purpose of discharging such of its functions as may be delegated to such sub-committee or sub-committees by the Central Fertiliser Committee.

5. The State Government may by notification in the Official Gazette and on such terms and conditions as may be specified in such notification, constitute a Committee called the State Fertiliser Committee consisting of a Chairman and not more than .4 other members, having experience or knowledge in the field, including a representative from State Agricultural University, the Fertiliser Industry and Indian Micro Fertilisers Manufacturers Association to advise the State Government regarding the grades/formulations of *mixture or of fertilisers.

39. Repeal and saving

1. The Fertiliser Control) Order, 1957 is hereby repealed except as respects things done or omitted to be done under the said Order before the commencement of this Order.

2. Notwithstanding such repeal, an order made by any authority, which is in force immediately before the commencement of this Order and which is consistent with this Order, shall continue in force and all appointments made, prices fixed, certificates granted and directions issued under repealed Order and in force immediately before such commencement shall likewise continue in force and be deemed to be made, fixed, granted or issued in pursuance of this Order till revoked.

SCHEDULE I
[See Clause 2(h) & (q)]
PART-A

SPECIFICATIONS OF FERTILISERS*

1(a). STRAIGHT NITROGENOUS FERTILISERS

1. Ammonium Sulphate

a.	Moisture per cent by weight, maximum	1.0
b.	Ammoniacal nitrogen per cent by weight, minimum	20.6
c.	Free acidity (as H2SO4.) per cent by weight, maximum (0.04 for material obtained from by-product ammonia and by-product gypsum)	0.025
d.	Arsenic as (As2O3) per cent by weight, maximum	0.01
e.	Sulphur (as S) ,per cent by weight, minimum	23.0

2. Urea (46% N) (While free flowing)

a.	Moisture per cent by weight, maximum	1.0
b.	Total nitrogen, per cent by weight, (on dry basis) minimum	46.00
c.	Biuret per cent by weight, maximum	1.5
d.	Particle size—[Not less than] 90 per cent of the material shall pass through 2.8 mm IS sieve and not less than 80 per cent by weight shall be retained on 1 mm IS sieve	

3. Urea (coated) (45% N) (While free flowing)

a.	Moisture per cent by weight, maximum	0.5
b.	Total nitrogen per cent by weight, content with coating, minimum	45.0
c.	Biuret per cent by weight maximum	1.5
d.	Particle size- [Not less than] 90 per cent of the material shall pass through 2.8 mm IS sieve an not less than 80 per cent by weight shall be retained on 1 mm IS sieve.	

4. Ammonium Chloride

a.	Moisture per cent by weight, maximum	2.0
b.	Ammoniacal nitrogen per cent by weight, minimum	25.0

c.	Chloride other than ammonium chloride (as NaCI) per cent by weight, (on dry basis) maximum	2.0
d.	Omitted	

*The name of the fertiliser is given in bold letters (which represents Column 1) \$,,-~ followed by specifications (which represents Column 2). 4(iv) Omitted vide S.O.1079 (E) dt.11.12.87

5. Calcium Ammonium Nitrate (25 % N)

a.	Moisture per cent by weight, maximum	1.00
b.	Total ammoniacal and nitrate nitrogen per cent by weight, minimum	25.0
c.	Ammoniacal nitrogen per cent by weight, minimum	12.5
d.	Calcium nitrate per cent by weight, maximum	0.5
e.	Particle size –[Not less than] 80 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 10 per cent shall be below 1 mm IS sieve	

6. Calcium Ammonium Nitrate (26% N)

a.	Moisture per cent by weight, maximum	1.00
b.	Total ammoniacal and nitrate nitrogen per cent by weight, minimum	26.0
c.	Ammoniacal nitrogen per cent by weight, minimum	13.0
d.	Calcium nitrate per cent by weight, maximum	0.5
e.	Particle size -—[Not less than] 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve	

7. Anhydrous Ammonia

a.	Ammonia per cent by weight, minimum	99.0
b.	Water per cent by weight, maximum	1.0
c.	Oil content by weight, maximum	20 ppm

8. Urea Super Granulated

a.	Moisture, per cent by weight, maximum	1.00

b.	Total nitrogen, per rent by weight (on dry basis), minimum	46.00
c.	Biuret per cent by weight, maximum	1.5
d.	Particle size- —[Not less than] 90 per cent of the material shall pass through 13.2 mm IS sieve and not less than 80 per cent by weight shall be retained on 9.5 mm IS sieve.	

9. Urea (Granular)

a.	Moisture, per cent by weight, maximum	1.00
b.	Total nitrogen, per rent by weight (on dry basis), minimum	46.00
c.	Biuret per cent by weight, maximum	1.5
d.	Particle size -—[Not less than] 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 2 mm IS sieve. Not more than 5 per cent shall be below 2 mm IS sieve."	

10. Urea Ammonium Nitrate (32%) (liquid)

a.	Total Nitrogen, percent by weight, minimum	32.0
b.	Urea Nitrogen, percent weight maximum	16.6
c.	Ammonical Nitrogen, percent by weight, minimum	7.7
d.	Nitrate Nitrogen, percent by weight, minimum	7.7
e.	Specify gravity (at 150 C)	1.32
f.	From ammonia (as NH3) percent by weight, minimum	0.10

1 (b). STRAIGHT PHOSPHATIC FERTIUSERS

1. Single Superphosphate (16% P 205 Powdered)

a.	Moisture per cent by weight, maximum	12.0
b.	Free phosphoric acid (as P 205) per cent by weight, maximum	4.0
c.	Water soluble phosphates (as P 205) per cent by weight, min	16.0
d.	Sulphur (as S),percent by weight ,min.	11.0

2. SIngle Superphosphate (14% P 205 Powdered)

a.	Moisture per cent by weight, maximum	12.0
b.	Free phosphoric acid (as P 205) per cent by weight, maximum	4.0
c.	Water soluble phosphates (as P 205) per cent by weight, min	14.0
d.	Sulphur (as S),percent by weight ,min.	11.0

3. Triple Superphosphate

a.	Moisture per cent by weight, maximum	12.0
b.	Free phosphoric acid (as P 205) per cent by weight, maximum	3.0
c.	Total phosphates (as p 205) per cent by weight, minimum	46.0
d.	Water soluble phosphates (as P 205) per cent by weight, minimum	42.0

4. Bone meal, Raw

(i)	Moisture per cent by weight, maximum	8.0
(ii)	Acid insoluble matter per cent by weight, maximum	12.0
(iii)	Total phosphates (as P 205) per cent by weight, minimum	20.0

(iv) 2 per cent citric acid soluble phosphates (as P 8.0 205) per cent by weight, minimum

(v)	Nitrogen content of water insoluble portion per cent by weight, minimum	3.0

(vi) Particle size-The material shall pass wholly through 2.36 mm IS sieve of which not more than 30 percent shall be retained on 0.85 mm ISsieve.

5. Bone meal, Steamed

(i)	Moisture per cent by weight, maximum	7.0
(ii)	Total phosphates (as P 205) per cent by weight, (on dry basis) minimum	22.0

(iii) 2 per cent citric acid soluble phosphates (as P 16.0 205) per cent by weight, (on dry basis) minimum

(iv) Particle size -Not less than 90 per cent of the material shall pass through 1.18 mm is sieve.

6. Rock phosphate

(i) Particle size-Minimum 90 per cent of the material shall pass through 0.15 mm IS sieve and the balance 10 per cent of material shall pass through 0.25 mm IS sieve.

(ii)	Total Phosphate (as P 205) per cent by weight. minimum	18.0

7. Single Superphosphate (16% P2O5 Granulated)

(i)	Moisture per cent by weight, maximum	5.0
(ii)	Free phosphoric acid (as P 205.) per cent by weight, maximum	4.0
(iii)	Water soluble phosphates (as P 205.) per cent by weight, minimum	16.0

(iv) Particle size -Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall pass through 1 mm IS sieve.

(v)	Sulphur (as S),percent by weight ,min.	11.0

8.Superphosphosphoric Acid (70%) P2O5 (liquid)

(i)	Total phosphate (asP2o5)percent by weight, minimum	70.0
(ii)	Polyphosphate (asP2o5)percent by weight, minimum	18.9
(iii)	Methanol Insoluble matter, percent weight, minimum	1.0
(iv)	Magnesium) as Mg0), percent by weight, minimum	0.5
(v)	Specific gravity (at 24*c)	1.96

1(c) STRAIGHT POTASSIC FERTIUSERS

1.Potassium Chloride (Muriate of Potash)

(i)	Moisture per cent by weight, maximum	0.5
(ii)	Water soluble potash content (as K20) per cent by weight, minimum	6O.0
(iii)	Sodium as NaCI per cent by weight (on dry basis) maximum	3.5
(iv)	biuret, per cent by weight maximum	1.5
(v)	Particle size -—Not less than 65 cent of the material shall pass through 1.7 mm IS sieve and be retained on 0.25 mm IS sieve.	

2.Potassium Sulphate

(i)	Moisture per cent by weight, maximum	1.5

(ii)	Potash content (as K2O) per cent by weight, minimum	50.00
(iii)	Total chlorides (as CI) per cent by weight, (on dry basis) maximum	2.5
(iv)	Sodium as NaCI per cent by weight, (on dry basis) maximum	2.0
(v)	Sulphur (as S),percent by weight ,min.	17.5

3. Potassium Schoenite

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Potash content (as K2O) per cent by weight (on dry basis), minimum	23.00
(iii)	Magnesium oxide (as MgO) per cent by weight, maximum	11.0
(iv)	Sodium (as NaCI) (on dry basis) per cent by weight, maximum	1.5

4. Potassium Chloride (Muriate of Potash) (Granular)

(i)	Moisture per cent by weight, maximum	0.5
(ii)	Water soluble potash (as K2O) per cent by weight, minimum	60.00
(iii)	Sodium (as NaCI), per cent by weight, maximum	3.5
(iv)	Magnesium (as MgCI2), per cent by weight, maximum	1.0

Particle size – not less than 90 per cent of the material shall pass through 3.35 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve

1(cc). Straight Sulphur Fertilisers

(1)	Sulphur 90% (powder)	
	(i) Moisture per cent by weight, maximum	1.00
	(ii) Total sulphur (as S) per cent by weight, minimum	90.00
(2)	Sulphur (granular)	
	(i) Moisture per cent by weight, maximum	0.5
	(ii) Total Sulphur (as as S) per cent by weight, minimum	90.00

(iii) Particle size – not less than 90 per cent of the material shall pass through 4.0 mm IS sieve and be retained on 1 mm IS sieve and not more than 5% shall be below 1 mm IS sieve.

1(d). N.P.[COMPLEX] FERTILISERS

1.Deleted vide S.O. 377(E) dt. 29.5.1992

2. Diammonium Phosphate (18-46-0)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	18.0
(iii)	Ammoniacal nitrogen form per cent by weight, minimum	15.5
(iv)	Total nitrogen in the form of urea per cent by weight, maximum	2.5
(v)	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	46.0
(vi)	Water soluble phosphates (as P 206) per cent by weight, minimum	41.0

(vii) Particle size -–[not less than]90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below than 1 mm size.

3. Ammonium Phosphate Sulphate (16-20-0)

i.	Moisture per cent by weight, maximum	1.0
ii.	Total ammoniacal nitrogen per cent by weight, minimum	16.0
iii.	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	20.0
iv.	Water soluble phosphates (as P 205) per cent by weight, minimum	19.5

v. Particle size-–[not less than]90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

vi.	Sulphur (as S),percent by weight ,min.	11.0

4. Ammonium Phosphate Sulphate (20-20-0)

(i)	Moisture per cent by weight, maximum	1.0
(ii)	Total nitrogen per cent by weight, minimum	20.0

(iii)	Ammoniacal nitrogen per cent by weight, minimum	18.0
(iv)	Nitrogen in the form of urea per cent by weight, maximum	2.0
(v)	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	20.0
(vi)	Water soluble phosphates (as P 205) per cent by weight, minimum	17.0

(vii) Particle size –[not less than]90 per cent of the material shall pass through4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve

(viii)	Sulphur (as S),percent by weight ,min.	13.0

5. Ammonium Phosphate Sulphate Nitrate (20-20-0)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	20.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	17.0

(iv) Nitrate nitrogen per cent by weight, maximum 3.0

(v) Neutral ammonium citrate soluble phosphates 20.0 (as P 205} per cent by weight, minimum

(vi)	Water soluble phosphates (as P 205) per cent by weight, minimum	17.0

(vii) Particle size---90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

(viii)	Sulphur (as S),percent by weight ,min.	13.0

6. Ammonium Phosphate Sulphate (18-9-0)

(i)	Moisture per cent by weight, maximum	1.0
(ii)	Ammoniacal nitrogen per cent by weight, minimum	18.0
(iii)	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	9.0
(iv)	Water soluble phosphates (as P 205) per cent by weight, .minimum	8.5

(v) Particle size -90 per cent of the material shall pass through

(vi) 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

7. Nitro Phosphate (20-20-0)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	20.0
(iii)	Nitrogen in ammoniacal form per cent by weight, minimum	10.0
(iv)	Nitrogen in nitrate form per cent by weight, maximum	10.0
(v)	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	20.0
(vi)	Water soluble phosphates (as P 205) per cent by weight, minimum	12.0
(v)	Calcium nitrate, per cent by weight, maximum	1.0

(vi) Particle size –[not less than] 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

8. Urea Ammonium Phosphate (28-28-0)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	28.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	9.0
(iv)	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	28.0
(v)	Water soluble phosphates (as P 205) per rent by weight, minimum	25.2

(vi) Particle size –[not less than]90 per cent of the matenal shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

9. Urea Ammonium Phosphate (24-24-0)

i.	Moisture per cent by weight, maximum	1.5
ii.	Total nitrogen per cent by weight, minimum	24.0
iii.	Ammoniacal nitrogen per cent by weight, minimum	7.5

iv.	Nitrogen in the form of urea per cent by weight, maximum	16.5
v.	Neutral ammonnium citrate soluble phosphates (as P 205) per cent by weight, minimum	24.0
vi.	Water soluble phosphates (as P 205) per cent by weight, minimum	20.4

vii. (vii)Particle size –[not less than]90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

(Note: This product contains inert filler material such as sand or dolomite to the extent of 20% by weight, maximum)

10. Urea Ammonium Phosphates (20-20-0)

i.	Moisture per cent by weight, maximum	1.5
ii.	Total nitrogen per cent by weight, minimum	20.0
iii.	Ammoniacal nitrogen per cent by weight, minimum	6.4
iv.	Neutral ammonical citrate soluble phosphates (as P 205) per cent by weight, minimum	20.0
v.	Water soluble phosphates (as P 205) per cent by weight, minimum	17.0

vi. Particle size- 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent
shall be below 1 mm IS sieve.

(Note: This product contains filler material (inert soil) to the extent of 30 % by weight)

11. Mono Ammonium Phosphate (11-52-0)

i.	Moisture per cent by weight, maximum	1.0
ii.	Total nitrogen all in ammoniacal form per cent by weight, minimum	11.0
iii.	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	52.0
iv.	Water soluble phosphates (as P 205) per cent by weight, minimum	44.2

v. Particle size-90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.Not more than 5 per cent shall be below 1 mm IS sieve.

12. Nltrophosphate (23-23-0)

i.	Moisture per cent by weight, maximum	1.5
ii.	Total nitrogen per cent by weight, minimum	23.0
iii.	Nitrogen in ammoniacal form per cent by weight, minimum	11.5
iv.	Nitrogen in nitrate form per cent by weight, maximum	11.5
v.	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	23.0
vi.	Water soluble phosphates (as P 205) per cent by weight, minimum	18.5
vii.	Calcium nitrate, per cent by weight, maximum	1.0

viii. Particle size-90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

13. Ammonium Nitrate Phosphate (23-23-0)

i.	Moisture per cent by weight, maximum	1.5
ii.	Total nitrogen per cent by weight, minimum	23.0
iii.	Nitrogen in ammoniacal form per cent by weight, minimum	13.0
iv.	Nitrogen in nitrate form per cent by weight, maximum	10.0
v.	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	23.0
vi.	Water soluble phosphates (as P 205) per cent by weight, minimum	20.5

vii. Particle size- 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

14. Ammonium Poly-phosphate (10-34-0)(Liquid)

i.	Total Nitrogen (all as Ammoniacal Nitrogen), percent by weight, Minimum	10.0
ii.	Total Phosphate (as P2O5) percent by weight minimum	34.0
iii.	Poly-phosphate) as P2O5) percent by weight minimum	22.1
iv.	Magenesium (as Mg0), percent by weight, minimum	0.5
v.	Specific gravity (at 27oC)	11.4
vi.	pH	5.8-6.2”

15. Ammonium Phosphate (14-28-0)

(i) Moisture, per cent by weight, maximum 1.5

(ii) Total nitrogen, per cent by weight, minimum 14.0

(iii) Urea nitrogen, per cent by weight, maximum 6.0

(iv) Ammoniacal nitrogen, per cent by weight, minimum 8.0

(v)	Neutral ammonium citrate soluble phosphates (as P2O5), per cent by weight, minimum	28.0
(vi)	Water soluble phosphates (as P2O5), per cent by weight, minimum	23.0

(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

16. 13:33:0:15S

(i)	Ammoniacal nitrogen per cent by weight, maximum	13.0
(ii)	Neutral ammonium citrate soluble phosphates (as P2O5), per cent by weight, minimum	33.0
(iii)	Water soluble phosphate (as P2O5), per cent by weight, minimum	30.0
(iv)	Total sulphur as S, per cent by weight, minimum	15.0
(v)	Elemental sulphur as S, per cent by weight, maximum	7.6
(vi)	Sulphate sulphur as S, per cent by weight, maximum	7.4
(vii)	Moisture per cent by weight, maximum	1.0
(viii)	Particle size – Not less than 90 percent of the	

material shall pass through 4 mm sieve and be retained on 1 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.

1 (e). N.P.K. .[COMPLEX] FERTILISER

1. Nitrophosphate with Potash (15-15-15)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen, minimum	15.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	7.5

(iv) Nitrate nitrogen per cent by weight, maximum 7.5

(v) Neutral ammonium citrate soluble phosphates 15.0 (as P 205) per cent by weight, minimum

(vi)	Water soluble phosphates (asP 205) per cent by weight, minimum	4.0
(vii)	Water soluble potash (as K2O) per cent by weight minimum	15.0

(viii) Particle size –[not less than]90 per cent of the material shall pass through4 mm IS sieve and be retained on 1 mm IS sieve

(ix) Calcium nitrate, per cent by weight; maximum 1.0

2. N.P.K. (10-26-26)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	10.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	7.0
(iv)	Nitrogen in the form of urea per cent by weight, maximum	3.0
(v)	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	26.0
(vi)	Water soluble potash (as K2O) per cent by weight, minimum	26.0
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	22.1

(viii) Particle size- Particle size of the material will be such that 90 per cent of the material will be between 1 mm and 4mm IS sieve and not more than 5 per cent will be below 1 mm size.

3. N.P.K. (12-32-16)

(i)	Moisture per cent by weight, maximum	1.0
(ii)	Total nitrogen per cent by weight, minimum	12.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	9.0
(iv)	Nitrogen in the form of urea per cent by weight, maximum	3.0
(v)	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	32.0
(vi)	Water soluble potash (as K2O) per cent by weight, minimum	27.2
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	16.0

(viii) Particle size -Particle size of the material will be such that 90 per cent of the material will be between 1 mm and 4 mm IS sieve and not more than 5 per cent will be below 1 mm size.

4. N.P.K (22-22-11)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	22.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	7.0

(iv) Urea nitrogen per cent by weight, maximum 15.0

(v) Neutral ammonium citrate soluble phosphate 22.0 (as P 205)
per cent by weight, minimum

(vi)	Water soluble potash (as K2O) per cent by weight, minimum	11.0
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	18.7

(viii) Particle size –[not less than]90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

5. N.P.K. (14-35-14)

(i)	Moisture per cent by weight, maximum	1.0
(ii)	Nitrogen in ammoniacal form per cent by weight, minimum	14.0

(iii)	omitted	
(iv)	Neutral ammonium citrate soluble phosphates (as P 205) per cent by weight, minimum	35.0
(v)	Water soluble potash (as K2O) per cent by weight, minimum	14.0
(vi)	Water soluble phosphate (as P 205) per cent by weight, minimum	29.7

(vii) Particle size -90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

6. N.P.K. (17-17-17)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	17.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	5.0

(iv) Urea nitrogen per cent by weight, maximum 12.0

(v) Neutral ammonium citrate soluble phosphate 17.0 (as P 205)
per cent by weight, minimum

(vi)	Water soluble potash (as K2O) per cent by weight, minimum	17.0
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	14.5

(viii) Particle size -90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve: Not more than 5 per cent shall be below 1 mm IS sieve.

7. N.P.K. (14-28-14)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	14.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	8.0

(iv) Urea nitrogen per cent by weight, maximum 6.0

(v) Neutral ammonium citrate soluble phosphate 28.0 (as P 205)
per cent by weight, minimum

(vi)	Water soluble potash (as K2O) per cent by weight, minimum	14.0
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	23.8

(viii) Particle size –[not less than]90 per cent of the material shall pass through 4mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

8. N.P.K. (19-19-19)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	19.0
(iii)	Ammoniacal nitrogen per cent by weight, minimum	5.6

(iv) Urea nitrogen per cent by weight, maximum 13.4

(v) Neutral ammonium citrate soluble phosphate 19.0 (as P 205)
per cent by weight, minimum

(vi)	Water soluble potash (as K2O) per cent by weight, minimum	16.2
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	19.0

(viii) Partide size -–[not less than]90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1mm IS sieve.

9. N.P.K. (17-17-17)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	17.0
(iii)	Ammonium nitrogen per cent by weight, minimum	8.5

(iv) Nitrate nitrogen per cent by weight, maximum 8.5

(v) Neutral ammonium citrate soluble phosphate 17.0 (as P 205)
per cent by weight, minimum

(vi)	Water soluble potash (as K2O) per cent by	17.0

	weight, minimum	
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	19.0

(viii) Particle size-80 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 20 per cent shall be above 4 mm IS sieve.

10. N.P.K.(20-10—10)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	20.0
(iii)	Urea nitrogen percent by weight, minimum	17.1
(iv)	Ammonical nitrogen percent by weight, minimum	3.9
(v)	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	10.0
(vi)	Water soluble potash (as K2O) per cent by weight, minimum	10.0
(vii)	Water soluble phosphate (as P 205) per cent by weight, minimum	8.5

11. N.P.K. (15:15:15)

(i)	Moisture per cent by weight, maximum	1.5
(ii)	Total nitrogen per cent by weight, minimum	15.0
(iii)	Ammonical nitrogen percent by weight, minimum	12.0
(iv)	Nitrogen in the form of Urea, per cent by weight, maximum	3.0
(v)	Water soluble phosphate (as P 205) per cent by weight, minimum	12.0
(vi)	Neutral ammonium citrate soluble phosphate (as P 205) per cent by weight, minimum	15.0
(vii)	Water soluble potash (as K2O) per cent by weight, minimum	15.0

Partide size -– not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.

1(f). MICRONUTRIENTS

1. Zinc Sulphate Heptahydrate (ZnSO4.7H2O)

(i)	[OMITTED]	
(ii)	Matter insoluble in water per cent by weight, maximum	1.0
(iii)	Zinc (as Zn) per cent by weight, minimum	21.0
(iv)	Lead (as Pb) per cent by weight, maximum	0.003
(v)	Copper (as Cu) per cent by weight, maximum	0.1
(vi)	Magnesium (as Mg) per cent by weight, maximum	0.5
(vii)	pH not less than	4.0
(viii)	Sulphur (asS),percent by weight, minimum	10.0
(ix)	Cadmium (as Cd), percent by weight, minimum	0.0025
(x)	Arsenic (as As),percent by weight,minimum	0.01

2. Manganese Sulphate

(i)	Free flowing form	
(ii)	Matter insoluble in water per cent by weight, maximum	1.2
(iii)	Manganese (as Mn) content per cent by weight, minimum	30.5
(iv)	Lead (as Pb) per cent by weight, maximum	0.003
(v)	Copper (as Cu) per cent by weight, maximum	0.1
(vi)	Magnesium (as Mg) per cent by weight, maximum	2.0
(vii)	pH not less than	4.0
(viii)	Sulphur (asS),percent by weight, minimum	10.0
(ix)	Cadmium (as Cd), percent by weight, minimum	17.0

3. Borax (Sodium Tetraborate) (Na2B4O7°10H2O) for soil application

(i)	Content of Boron as (B) per cent by weight, minimum	10.5	
(ii)	Matter insoluble in water per cent by weight, maximum	1.0	
(iii)	pH		9.0-9.5
(iv)	Lead (as Pb) per cent by weight, maximum	0.003	

4.Omitted

5. Copper Sulphate (CuSO4.5H2O)

(i)	Copper (as Cu) percent by weight, minimum	24.0
(ii)	Matter insoluble in water percent by weight, maximum	1.0
(iii)	Soluble iron and aluminium compounds (expressed as Fe), percent by weight, maximum	0.5
(iv)	Lead (as Pb) percent by weight, maximum	0.003
(v)	pH not less than	3.0
(vi)	Sulphur (asS),percent by weight, minimum	17.0

6. Ferrous Sulphate (FeSO4.7H2O)

(i)	Ferrous iron (as Fe) per rent by weight, minimum	19.0
(ii)	Free Acid (as H2SO 4), per cent by weight, maximum	1.0
(iii)	Ferric Iron (as Fe), percent by weight, maximum	0.5
(iv)	Matter insoluble in water, percent by weight, maximum	1.0
(v)	pH not less than	3.5
(vi)	Lead (as Pb) per rent by weight, maximum	0.003
(vii)	Sulphur (asS),percent by weight, minimum	10.5

7 .Ammonium Molybdate (NH4)6MO7O244H2O)

(i)	Molybdenum (as Mo), per rent by weight, minimum	52.0
(ii)	Matter insoluble in water, per cent by weight, maximum	1.0
(iii)	Lead (as Pb), per rent by weight, maximum	0.003

8. Chelated Zinc as Zn-EDTA

(i)	Appearance -Free flowing crystalline / powder	
(ii)	Zinc content (Expressed as Zn), per rent by weight minimum in the form of Zn-EDTA	2.0
(iii)	Lead (as Pb), per rent by weight maximum	0.003
(iv)	pH	6.0-6.5

9. Chelated Iron as Fe-EDTA

(i) Appearance -Free flowing crystalline / powder

(ii) Iron content (expressed as Fe), per rent by weight minimum in the form of Fe-EDTA 12.0

(iii)	Lead (as Pb) per cent by weight, maximum	0.003
(iv)	pH	5.5-6.5

10. Zinc Sulphate Mono-hydrate (ZnSO4 H2O)

(i)	Free flowing powder form	
(ii)	Matter-insoluble in water, per cent by weight, maximum	1.0

(iii) Zinc (as Zn). per cent by weight. minimum 33.0

(iv) Lead (as Pb), per cent by weight, maximum 0.003

(v) Copper (as Cu), per cent by weight, maximum 0.1

(vi) Magnesium (as Mg), per cent by weight, maximum 0.5

(vii)	Iron (as Fe), per cent by weight, maximum	1.0
(viii)	pH not less than	4.0
(ix)	Sulphur (asS),percent by weight, minimum	15.0
(x)	Cadmium (asCd),percent by weight, minimum	0.0025

(xi) Arsenic (as As),percent by weight, minimum 0.01

11. Magnesium Sulphate

(i)	Free flowing -crystalline form	
(ii)	Matter insoluble in water, per cent by weight, maximum.	1.0
(iii)	Magnesium {as Mg), per cent by weight, minimum	9.6
(iv)	Lead (as Pb), percent by weight, maximum. 0.003 (v) pH (5% solution)	5.0-8.0
(v)	Sulphur (asS),percent by weight, minimum	12.0

12. Boric Acid (H3BO3)

(i)	Boron (as B) per cent weight, minimum	17.0
(ii)	Matter insoluble in water, per cent by weight, maximum	1.0
(iii)	Lead (as Pb) per cent by weight, maximum	0.003]

13. Di-Sodium Octa Borate Tetra Hydrate

(i)	Boron (as B) per cent weight, minimum	20.0
(ii)	Matter insoluble in water, per cent by weight, maximum	1.0
(iii)	Lead (as Pb) per cent by weight, maximum	0.003]

14. **Di-Sodium Tetra Borate Penta Hydrate**

(i)	Boron (as B) per cent weight, minimum	15.0
(ii)	Matter insoluble in water, per cent by weight, maximum	1.0
(iii)	Lead (as Pb) per cent by weight, maximum	0.003
(iv)	Arsenic (as As), per cent by weight, minimum	0.01

Particle size – Not less than 95% of the material shall pass to 5 mm IS sieve and be retained on 1.4 mm IS sieve.

***1(g) FORTIFIED FERTILISERS**

1. Boronated Single Superphosphate (16% P2O. powdered)

Moisture per cent by weight, maximum	12.0
Free phosphoric acid (as P 205) per cent by weight, maximum	4.0
Water soluble phosphate (as P 205) per cent weight, minimum	16.0 by
Boron (as B) per cent by weight	0.15-0.20

2. Zincated Urea

(i)	Moisture per cent by weight, maximum	1.0
(ii)	Total nitrogen per cent by weight, (on dry basis), minimum	43.0
(iii)	Zinc (as Zn) per cent by weight, minimum	2.0

	3. Zincated Phosphate (suspension)	
(i)	Total phosphate (as P2O5), per cent by weight, minimum	12.9
(ii)	Total zinc (Zn), per cent by weight, minimum	19.4
(iii)	Neutral ammonium citrate soluble phosphate as (P2O5), per cent by weight, minimum	3.9
(iv)	Lead as Pb), per cent by weight, minimum	0.003

(v)	pH	8±1
	4. NPK Complex fertilizer fortified with boron (10:26:26:0.3)	
(i)	Moisture, percent by weight, maximum	0.1
(ii)	Total nitrogeon percent by weight, minimum	10.0
(iii)	Ammoniacal Nitrogen percent by weight, minimum	7.0
(iv)	Urea Nitrogen (as N), percent by weight, maximum	3.0
(v)	Neutral Ammonium Citrate Soluble Phosphate as (P2O5), percent by weight, maximum	26.0
(vi)	Water soluble Phosphate as (P2O5) percent by weight, minimum	22.1
(vii)	Water Soluble Potash (as K2O), percent by weight, minimum	26.0
(viii)	Boron (as B) percent by weight, minimum Particle size – Not less than 90 per cent of the material shall be between 1 mm and 4 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.	0.3

1(h) [100% water soluble Complex Fertiliser]

1.Pottasium Nitrate (13-0-45)

(i)	Free flowing crystalline	
(ii)	Moisture percent by weight max	0.5
(iii)	Total Nitrogen (all in Nitrate form),percent by weight ,minimum	13,0
(iv)	Water soluble Potash(as K20)	1.0
(v)	Sodium (as Na)(On dry basis) percentby weight,min.	1.0
(vi)	Total Chloride(as Cl)(On dry basis)percentby weight,max.	1.5
(vii)	Matter insoluble in water percent byweight , maximum.	0.05

2.Omitted

3. Mono – Pottasium Phosphate (0-52-34) (100% water Soluble)

(i)	Moisture percent by weight max.	0.5
(ii)	Water Soluble Phosphate(as P2 O5)percent by weight, minimum	52.0
(iii)	Water Soluble Potash (as K20) percent by weight, minimum	34.0
(iv)	Sodium(as NaCl) percent by weight)0n dry basis),maximum	0.025

4. Calcium Nitrate

(i)	Total Nitrogen, percent by weight minimum	15.5
(ii)	Ammonical Nitrogen percent by weight, max.	1.1
(iii)	Nitrate Nitrogen as N percent by weight minimum	14.4.
(iv)	Water soluble Calcium as percent by weight, minimum	18.8.

5. NPK 13:40:13 (100% water soluble)

(i)	Total Nitrogen per cent by weight, minimum	13.0
(ii)	Nitrate nitrogen, per cent by weight, maximum	4.4
(iii)	Ammonical nitrogen per cent by weight , minimum.	8.6
(iv)	Water soluble phosphate(as P2O5) per cent by weight, minimum.	40.0
(v)	Water soluble potash as K2O, per cent by weight, minimum.	13.0
(vi)	Sodium (as NaCl) per cent by weight. on dry basis, maximum.	0.15
(vii)	Matter insoluble in water per cent by weight, maximum.	0.5

6. NPK 18:18:18 (100% water soluble)

(i)	Total Nitrogen per cent by weight, minimum	18.0
(ii)	Nitrate nitrogen per cent by weight, maximum.	9.8
(iii)	Ammonical nitrogen per cent by weight, minimum.	8.2
(iv)	Water Soluble phosphate(as P2O5) per cent by weight, minimum.	18.0
(v)	Water soluble potash (as K2O) per cent by weight, minimum.	18.0
(vi)	Sodium as NaCl per cent by weight. , on dry basis maximum.	0.25
(vii)	Matter insoluble in water per cent by weight, maximum	0.5

7. NPK 13:5:26 (100% water soluble)

(i)	Total Nitrogen per cent by weight, minimum	13.0
(ii)	Nitrate nitrogen per cent by weight, maximum.	7.0
(iii)	Ammonical nitrogen per cent by weight, minimum.	6.0
(iv)	Water soluble Phosphate (as P2O5) per cent by weight, minimum.	5.0
(v)	Water soluble potash as K2O per cent by weight, minimum.	26.0
(vii)	Sodium as NaCl per cent by weight, on dry basis	0.3
(viii)		

	Matter insoluble in water per cent by weight, maximum.	0.5

8. NPK 6:12:36 (100% water soluble)

(i)	Total Nitrogen per cent by weight,. minimum	6.0 Nitrate
(ii)	nitrogen per cent by weight, maximum.	4.5
(iii)	Ammonical nitrogen per cent by weight minimum.	1.5
(iv)	Water Soluble Phosphate(as P205)per cent by weight., minimum.	12.0
(v)	Water soluble potash per cent by weight, minimum.	36.0
(vi)	Sodium as NaCl per cent by weight, maximum	0.5
(vii)	Matter insoluble in water per cent by weight, maximum.	0.5

9 NPK 20:20:20 (100% water soluble)

(i)	Total Nitrogen per cent by weight, minimum	20.0
(ii)	Nitrate nitrogen percent by weight, maximum	4.9
(iii)	Ammonical nitrogen percent by weight, minimum	3.0
(iv)	Urea nitrogen percent by weight,maximum	12.1
(v)	Water soluble Phosphate (as P2O5) per cent by weight, minimum.	20.0
(vi)	Water soluble potash as K2O, per cent by weight,.minimum.	20.0
(vii)	Sodium as NaCl per cent by weight on dry basis,maximum.	0.06
(viii)	Matter insoluble in water per cent by weight,maximum.	0.5".

10 Potassium Magnesium Sulphate

(i)	Moisture per cent by weight, maximum	0.5
(ii)	Potash content (as K2O) per cent by weight, minimum	22.0
(iii)	Magnesium as MgO, percent by weight ,minimum	18.0
(iv)	total chloride (asCl),percent by weight (on dry basis),max	2.5
(v)	Sodium (as NaCl) ,percent by weight(on dry basis),max.	2.0
(vi)	Sulphur (as S) percentby weight,min	20.0

11. NPK 19 :19:19 (100% water soluble)

(i)	Total Nitrogen per cent by weight, minimum	19.0
(ii)	Nitrate nitrogen per cent by weight, maximum	4.0
(iii)	Ammonical nitrogen per cent by weight, maximum.	4.5

(iv)	Urea nitrogen,percent by weight,maximum	10.5
(v)	Water soluble Phosphate (as P2O5) per cent by weight, minimum.	5.0
(vi)	Water soluble potash as K2O per cent by weight, minimum.	26.0
(vii)	Sodium as NaCl per cent by weight, on dry basis	0.3
(viii)	Matter insoluble in water per cent by weight, maximum.	0.5
	12. Mono Ammonium Phosphate 12:61:0 (100% water soluble)	
(i)	Moisture, per cent by weight,. max	0.5
(ii)	Ammonical nitrogen per cent by weight minimum.	12.0
(iii)	Water Soluble Phosphate(as P205)per cent by weight., minimum.	61.0
(iv)	Sodium as NaCl per cent by weight, maximum.	0.5
(v)	Matter insoluble in water per cent by weight, maximum	0.5

PART -B

TOLERANCE LIMIT IN PLANT NUTRIENT FOR VARIOUS FERTILISERS

1	For fertilisers with definite compounds Nutrients like ammonium sulphate, urea, ammonium chloride, muriate of potash, sulphate of potash, superphosphate, dicalcium phosphate, sulphur powder and Sulphur granular which contain more than 20 per cent plant nutrients	0.2
	For those which contain less than 20 per cent plant nutrients	0.1
2.	For calcium ammonium nitrate	0.3
3.	For diammonium phosphale	0.5 units each for N & P contents
4.	For nitrophosphates, ammonium sulphate nitrate, urea, ammonium phosphate, ammonium phosphate ammonium phosphate sulphate, bonemeal, granulated mixture, compound/complex/ 100% Water soluble fertilizer/physical mixtures of fertilizers (NPK mixtures) mixtures	Tolerance varies with nutrient level in ertilizer subject to maximum of 2 per cent for all combined nutrients:- Nutrients Level / Tolerance level

of NPK with micronutrients (%)	(unit)
15 or less	0.5
16 to 20	0.6
21 or more	0.7

Note:

(a) In serial number 4, the term nutrient besides NPK also includes Sulphur

(b) The term nutrient in serial number 1,2,3,5,6, 7 and 8 includes N,P,K, S, Ca, Mg, Ge, Mn, Zn, Cu, B & Mo.

(c) In case of fertilizers where "Sulphur' has been specified in the specification under Schedule I Part A, the tolerance limit shall be same as prpescribed under serial number 1,6 and 8 independently for each Nutrient".

5.	For Borax, chelated Zinc-EDTA and Chelated iron-EDTA	0.1
6	For Solubor, copper sulphate, Zinc sulphate, manganese sulphate and ferrous sulphate	0.2
7.	For ammonium molybdate	0.5
	+For magnesium sulphate	0.1

"9. For mixture of micronutrient fertilizers

Tolerance varies . with combined nutrient level in **fertilizer**.

Nutrient (%)	Tolerance Level level (unit)
10 or less	0.1
11 to 20	0.2
21 or more	0.5
10 Particle size	3 units
11.Moisture	0.3 units

"Schedule III

[see clause 2(h) and (q)]

PART – A

SPECIFICATION OF BIOFERTILISERS

1. Rhizobium

(i)	Base	=	Carrier based* or liquid based
(ii)	Viable cell count	=	CFU minimum 10_7 cell/g of carrier material or 10_7 cell/ml of liquid material.
(iii)	Contamination level	=	No contamination at 10_5 dilution
(iv)	PH	=	6.5 – 7.5
(v)	Particle size in case of carrier based material	=	All material shall pass through 0.15-0.212 mm IS Sieve
(vi)	Moisture percent by weight, maximum in case of carrier based	=	30-40%
(vii)	Efficiency Character	=	Should show effective nodulation on all the species listed on the packet.

***Type of Carrier:**

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favoring growth of the organism.

2. Azotobacter

(i)	Base	=	Carrier based* or liquid based
(ii)	Viable cell count	=	CFU minimum 10_7 cell/g of carrier material or 10_7 cell/ml of liquid material.
(iii)	Contamination level	=	No contamination at 10_5 dilution
(iv)	pH	=	6.5 – 7.5
(v)	Particle size in case of carrier based material	=	All material shall pass through 0.15-0.212 mm IS Sieve
(vi)	Moisture percent by weight, maximum	=	30-40%
(vii)	Efficiency Character	=	The strain should be capable of fixing at least 10 mg of nitrogen per g of sucrose consumed

***Type of Carrier:**

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favoring growth of the organism.

3. Azospirillum

(i)	Base	=	Carrier based* or liquid based
(ii)	Viable cell count	=	CFU minimum 10_7 cell/g of carrier material or 10_7 cell/ml of liquid material.
(iii)	Contamination level	=	No contamination at 10_5 dilution
(iv)	pH	=	6.5 – 7.5
(v)	Particle size in case of carrier based material	=	All material shall pass through 0.15-0.212 mm IS Sieve
(vi)	Moisture percent by weight, maximum in case of carrier based	=	30-40%
(vii)	Efficiency Character	=	Formation of white pellicle in semisolid Nitrogen free bromothymol blue media.

***Type of Carrier:**

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favoring growth of the organism.

4. Phsophate Solubilising Bacteria

(i)	Base	=	Carrier based* or liquid based
(ii)	Viable cell count	=	CFU minimum 10_7 cell/g of carrier material or 10_7 cell/ml of liquid material.
(iii)	Contamination level	=	No contamination at 10_5 dilution
(iv)	pH	=	6.5 – 7.5
(v)	Particle size in case of carrier based material	=	All material shall pass through 0.15-0.212 mm IS Sieve
(vi)	Moisture percent by weight, maximum in case of carrier based	=	30-40%
(vii)	Efficiency Character	=	The strain should have phosphate solubilizing capacity in the range of minimum 30%, when tested spectrophotometrically. In terms of zone formation, minimum 5 mm solubilization zone in prescribed media having at least 3 mm thickness

***Type of Carrier:**

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favoring growth of the organism.

OF BIOFERTILISER

Part – B

TOLERANCE LIMIT

5 x 10_5 CFU/g of carrier or per ml of liquid material.

Schedule – IV
[see clause 2(h) and (q)]
Part – A
SPECIFICATION OF ORGANIC FERTILISER

1. <u>City compost</u>:

(i)	Moisture, per cent by weight	15.0-25.0
(ii)	Colour	Dark brown to black
(iii)	Odour	Absence of foul odour
(iv)	Particle size	Minimum 90% material should pass through 4.0 mm IS Sieve
(v)	Bulk Density (g/cm_3)	0.7 -0.9
(vi)	Total Organic Carbon, Per cent by weight, Minimum	16.0
(vii)	Total Nitrogen (as N) Per cent by weight, Minimum	0.5
(viii)	Total Phosphates(as P_2O5) Per cent by weight, Minimum	0.5
(ix)	Total Potash (as K_2O) Per cent by weight, Minimum	1.0
(x)	C:N ratio	20 : 1 or less
(xi)	pH	6.5 – 7.5
(xii)	Conductivity (as dsm^{-1}), Not more than	4.0
(xiii)	Pathogens	Nil
(Xiv)	Heavy metal content, (as mg/Kg) per cent by weight, Maximum	
	Arsenic (as As_2O_3)	10.00
	Cadmium (as Cd)	5.00
	Chromium (as Cr)	50.00
	Copper (as Cu)	300.00
	Mercury (as Hg)	0.15
	Nickel (as Ni)	50.00
	Lead (as Pb)	100.00
	Zinc (as Zn)	1000.00

2. <u>Vermicompost</u> :

(i)	Moisture, per cent by weight	15.0-25.0
(ii)	Colour	Dark brown to black
(iii)	Odour	Absence of foul odour
(iv)	Particle size	Minimum 90% material

		should pass through 4.0 mm IS Sieve
(v)	Bulk Density (g/cm_3)	0.7 -0.9
(vi)	Total Organic carbon per cent by weight, Minimum	18.0
(vii)	Total Nitrogen (as N) per cent by weight, Minimum	1.0
(viii)	Total Phosphate (as P_2O5) per cent by weight, Minimum	1.0
(ix)	Total Potassium (as K_2O) per cent by weight, Minimum	1.0
(x)	Heavy metal content, (as mg/Kg) per cent by weight, Maximum	
	Arsenic (as As_2O_3)	10.00
	Cadmium (as Cd)	5.00
	Chromium (as Cr)	50.00
	Mercury (as Hg)	0.15
	Nickel (as Ni)	50.00
	Lead (as Pb)	100.00

3. <u>Pressmud</u> :

(i) Moisture, per cent by weight, Maximum	15.0
(ii) Total Nitrogen (as N) per cent by weight, Minimum	1.80
(iii) Total Phosphorous(as P_2O_5) per cent by weight, Minimum	2.00
(iv) C:N ratio, Minimum	10:1
(v) Total Potassium (as K_2O) per cent by weight, Minimum	1.40
(vi) PH	7.0-8.0
(vii) Heavy metal content, (as mg/Kg) per cent by weight, Maximum	
Arsenic (as As_2O_3)	10.00
Cadmium (as Cd)	5.00
Chromium (as Cr)	50.00
Copper (as Cu)	300.00
Mercury (as Hg)	0.15
Nickel (as Ni)	50.00
Lead (as Pb)	100.00
Zinc (as Zn)	1000.00

Part – B

TOLERANCE LIMIT OF ORGANIC FERTILISER

0.1 unit for combined Nitrogen, Phosphorus and Potassium Nutrients

GRANT OF PERMISSION FOR USE OF FERTILISIER FOR INDUSTRIAL PURPOSE.

The manufacturer of industrial product who intend to use fertilizer as raw material for manufacturing the product may apply to the Central Government in the Proforma I (appended below)along with the recommendation from the State Government/Central Government/ District Industry Centre of the concern State.

PROFORMA – I

1. Name of the applicant:
2. Postal Address:
3. Location and address where Factory is situated
4. Name of the recommending authority with which the Company is registered i.e. Directorate General Tech. Development/Development Commissioner (Small Scale Industries) Textile Commissioner, Government of India
5. Registration No. and Date
6. Item manufactured
7. Chemical Process of the item for which urea Or other fertilizers are required
8. Installed capacity for each item, requiring use Of Urea or other fertilizer.
9. Production during last 3 years of each item, Requiring use of urea or other fertilizers
10. Last 3 years **consumption** of urea or other Fertilizer (Specify the fertilizer used, each year Supported by a certificate of Chartered Accountant)
11. Quantity of Urea or other fertilizers purchased during the last three years (specify the fertilizer, purchased each year, supported by a certificate of Chartered Accountant).
12. Name of the manufacture/dealer (with complete address from whom Urea or other fertilizer was purchased each year.
13. Whether recommendation of DGTD/DC(SSI),Textile Commissioner on the quantity of fertilizer required has been issued and if so, how much quantity of fertilizers has been recommended.
14. Requirement of urea or other fertilizer for the current year.
15. Whether the requisite certificate from Chartered Accountant is attached with this application.
16. Name of the supplier

Signature of Authorized Signatory

Document to be attached

1.Application in prescribed proforma

2.Certificate from the Chartered Accountant of fertilizer purchase/consum for industrial use.

3.Recommendation from the State Government/ Central Government/ District Industry Centre of the concerned State Government.

4.GRANT OF CERTIFICATE OF REGISTRATION FOR SALE OF FERTILISER FOR INDUSTRIAL PURPOSE-

Under Clause 8 of Fertiliser (Control) Order,1985 for Certificate of Registration is granted for carrying on the business of selling of Fertiliser for industrial purpose.

For this purpose the application is required to be made to Controller of fertilizer in prescribed Form 'A'(appended below) together with fee of Rs. 1500/- and certificate of source in Form 'O' issued by the manufacture of fertilizer .

Currently, the Government of India is granting industrial dealership for sale of Urea only.

FORMS FOR REGISTRATION

FORM 'A'

{ See Clause 8}

FORM OF APPLICATION TO OBTAIN DEALERS'S (INDUSTRIAL)* CERTIFICATE OF REGISTRATION

To

The *Controller (if the application is for industrial dealer's certificate of registration)

Place_____ Sate of _____

1. Full name and address of the applicant:

(a) Name of the concern, and postal address: (b)

Place of business (Please give exact address):

(i) for safe

(ii) for storage

2. Is it a proprietary/partnership/limited company/Hindu Undivided family concern? Give the name(s) and address(es) of proprietor/partners/ manager/Karta:

3.In what capacity is this application field.

(i) Proprietor
(ii) Partner
(iii) Manager
(iv) Karta

4.Whether the application is for wholesale or retail or **industrial dealership?

5.Have you ever had a fertilizer dealership registration certificate in the past?

If so, give the following details:

(i) Registration number
(ii) Place for which granted
(iii) Whether wholesale or retail or **industrial dealership.
(iv) Date of grant of registration certificate
(v) Whether the registration certificate is still valid?
(vi) If not, when expired?
(vii) Reasons for non-renewal
(viii)If suspended/cancelled and if so, when
(ix) Quantity of fertilizers handled during last year (x) Names of products handled
(xi) Name of source of supply of fertilizers.

6.Was the applicant ever convicted under the Essential Commodities Act, 1955 or any Order issued thereunder including the Fertiliser (Control) Order,1957 during the last three years proceeding the date of application? If so give details.

7.Give the details of the fertilizers to be handled

Sl.No.	Name of Fertiliser	Source of supply

8.Please attach certificate(s) of source from the supplier(s) indicated under column 3 of Sl.No.7.

9.I have deposited the registration fee of Rs._____ vide Challan No._____ dated _____ in treasury/Bank *or enclose the Demand Draft No. _____ dated _____ for Rs._____ drawn on _____ Bank, in favour of _____ payable at _____ towards registration fee. (Please strike-out whichever is not applicable).

10.Declaration:-

(a)I/we declare that the information given above is true to the best of my/our knowledge and belief and no part thereof is false.

(b)I/we have carefully read the terms and conditions of the Certificate of Registration given in Form 'B' appended to the Fertiliser (Control) Order,1985 and agree to able by them

(c)*I/we declare that I/we do not possess a certificate of registration for industrial dealer and that I/we shall not sell fertilizers for industrial use. (Applicable in case a person intends to obtain a wholesale dealer or retail dealer certificate of registration, excepting a State Government, a manufacturer or importer or a pool handling agency).

(d)** I/we declare that I/we do not possess a certificate of registration for wholesale dealer or retail dealer and that I/we shall not sell fertilizers for agricultural use.(Applicable in case a person intends to obtain a industrial dealer certificate of registration, excepting a State Government, a manufacturer, importer or a pool handling agency).

Signature of the Applicant(s)

Date
Place

Note:

(1)Where the business of selling fertilizers is intended to be carried on at more than one place, a separate application should be made for registration in respect of each such place.

(2)Where a person intends to carry on the business of selling fertilizers both in retail and wholesale, separate applications for retail and wholesale business should be made.

(3)Where a person represents or intends to represent more than one State Government, Commodity Board, Manufacturer/Importer or Wholesale dealer, separate certificate of source from each such source should be enclosed.

For use in Office of *Controller

Date of receipt

Name and designation of Officer receiving the Application.

Import of 100% Water Soluble Fertilisers for trial purpose.

The fertigation through drip irrigation and sprinkler irrigation has attained special importance in Agriculture. In view of launching of special Horticulture Development Schemes/floriculture programme, the Ministry of Agriculture has been promoting Drip Irrigation System, sprinklers and fertigation, with a view to improve the use and efficiency of both water and fertilizers. The importers have approaching this Ministry for granting permission for importing 100% water soluble fertilizers for trail purpose to establish the efficacy in various crops under field conditions. As per the policy

the Government has allowed upto 5 tonnes per grade of micronutrient or mixture of micronutrient and upto 10 tonnes per grade of NPK fertilizers including complexes/mixtures) in prescribed proforma.

<u>Format for import of Fertiliser Product for trails in India</u> 1.
Name of Organization/Company
(with full address)

2. Name of Chemical/material/fertilizer with
Composition to be imported.

3. Name of the country from which fertilizer/
Material to be imported
(1)Name of organization/company/Manufacturers
(2)Whether manufactures is authorized to supply the material.

4. Quantity of chemical material to be imported

5. Purpose/objectives

6. Experience in the use of material in India or any other
Country.

To be enclosed with the brief write-up and data

7. No. of trials and location where Trials are to be conducted.

8. Area to be covered under trials

9. Experimental programme of trials

10. Name of Department/University/Organisation farmers
Trials to be conducted along with consent thereof.

11. No. of seasons crops for which Fertiliser required for trials 12.
Name of experienced/qualified Expertise available for
Handing the fertilizer experiment
13. Cost of imported grades chemicals and who will bear The
cost of fertilizer/material for experiment
14. For how many seasons trials are proposed to be conducted 15.
What is the proposal after trial Results are obtained
16.Remarks if any

Signature of authority

SCHEDULE – I

[See Clause 2(h) & (q)]

PART-A

SPECIFICATIONS OF FERTILISERS

1(a). STRAIGHT NITROGENOUS FERTILISERS

1. Ammonium Sulphate

(i) Moisture per cent by weight, maximum	1.0
(ii) Ammoniacal nitrogen per cent by weight, minimum	20.6
(iii) Free acidity (as H_2SO_4) per cent by weight, maximum	0.025
(0.04 for material obtained from by-product ammonia and by-product gypsum)	0.01
(iv) Arsenic as (As_2O_3) per cent by weight, maximum	23.0
(v) Sulphur (as S) per cent by weight, minimum	

2. Urea (46% N) (While free flowing)

(i) Moisture per cent by weight, maximum 1.0 (ii) Total nitrogen, per cent by weight, (on dry basis), minimum 46.0 (iii) Biuret per cent by weight, maximum 1.5 (iv) Particle size—Not less than 90 per cent of the material shall pass through 2.8 mm IS sieve and not less than 80 per cent by weight shall be retained on 1 mm IS sieve

3. Urea (coated) (45% N) (While free flowing)

(i) Moisture per cent by weight, maximum	0.5
(ii) Total nitrogen per cent by weight, content with coating, minimum	45.0
(iii) Biuret per cent by weight, maximum	1.5
(iv) Particle size–Not less than 90 per cent of the material shall pass through 2.8 mm IS sieve and not less than 80 per cent by weight shall be retained on 1 mm IS sieve.	

4. Ammonium Chloride

(i) Moisture per cent by weight, maximum	2.0
(ii) Ammoniacal nitrogen per cent by weight, minimum	25.0
(iii) Chloride other than ammonium chloride (as NaCI) per cent by weight, (on dry basis), maximum	2.0
(iv) Omitted vide S.O. 1079(E) dt. 11.12.1987	1.0

5. Calcium Ammonium Nitrate (25% N) 25.0

(i) Moisture per cent by weight, maximum	12.5
(ii) Total ammoniacal and nitrate nitrogen per cent by weight, minimum	0.5
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv) Calcium nitrate per cent by weight, maximum	
(v) Particle size –Not less than 80 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 10 per cent shall be below 1 mm IS sieve	

6. Calcium Ammonium Nitrate (26% N)

(i) Moisture per cent by weight, maximum	1.0
(ii) Total ammoniacal and nitrate nitrogen per cent by weight, minimum	26.0
(iii) Ammoniacal nitrogen per cent by weight, minimum	13.0
(iv) Calcium nitrate per cent by weight, maximum	0.5
(v) Particle size -—Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on	

1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve

7. Anhydrous Ammonia

(i) Ammonia per cent by weight, minimum	99.0
(ii) Water per cent by weight, maximum	1.0
(iii) Oil content by weight, maximum	20 ppm

8. Urea Super Granulated

(i) Moisture per cent by weight, maximum	1.0 (ii)
Total nitrogen, per cent by weight (on dry basis), minimum	46.0
(iii) Biuret per cent by weight, maximum	1.5 (iv)

Particle size- —Not less than 90 per cent of the material shall pass through 13.2 mm IS sieve and not less than 80 per cent by weight shall be retained on 9.5 mm IS sieve.

9. Urea (Granular)

(i) Moisture per cent by weight, maximum	1.0
(ii) Total nitrogen per cent by weight (on dry basis), minimum	46.0
(iii) Biuret per cent by weight, maximum	1.5

(iv) Particle size -—Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 2 mm IS sieve. Not more than 5 per cent shall be below 2 mm IS sieve.

10. Urea Ammonium Nitrate (32%N) (Liquid)

(i) Total nitrogen per cent by weight, minimum	32.0
(ii) Urea nitrogen per cent weight, maximum	16.6
(iii) Ammonical nitrogen per cent by weight, minimum	7.7
(iv) Nitrate nitrogen per cent by weight, minimum	7.7
(v) Specific gravity (at 15_o C)	1.32
(vi) Free ammonia (as NH_3) per cent by weight, maximum	0.10

11. Neem Coated Urea

(i) Moisture per cent by weight, maximum	1.0
(ii) Total nitrogen per cent by weight, minimum	46.0
(iii) Biuret, per cent by weight, maximum	1.5
(iv) Benzene soluble content, per cent by weight, minimum	0.035

Particle size : Not less than 90 per cent of the material shall pass through 2.8 mm IS sieve and not less than 80 per cent by weight shall be retained on 1 mm IS sieve."

1 (b). STRAIGHT PHOSPHATIC FERTILISERS

1. Single Superphosphate (16% P_2O_5 Powdered)

(i) Moisture per cent by weight, maximum	12.0
(ii) Free phosphoric acid (as P_2O_5) per cent by weight, maximum	4.0
(iii) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	14.5 (iv)
Sulphur (as S) per cent by weight, minimum	11.0 (v)
Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	16.0

2. Single Superphosphate (14% P_2O_5 Powdered)

(i) Moisture per cent by weight, maximum	12.0
(ii) Free phosphoric acid (as P_2O_5) per cent by weight, maximum	4.0
(iii) Water soluble phosphates (as P_2O_5) per cent by weight,	14.0

minimum

(iv) Sulphur (as S) per cent by weight, minimum 11.0

3. Triple Superphosphate

(i) Moisture per cent by weight, maximum 12.0

(ii) Free phosphoric acid (as P_2O_5) per cent by weight, maximum 3.0

(iii) Total phosphates (as P_2O_5) per cent by weight, minimum 46.0

(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 42.5

4. Bone meal, Raw

(i) Moisture per cent by weight, maximum 8.0

(ii) Acid insoluble matter per cent by weight, maximum 12.0

(iii) Total phosphates (as P_2O_5) per cent by weight, minimum 20.0

(iv) 2 per cent citric acid soluble phosphates (as P_2O_5) per cent by weight, minimum 8.0 (v)

Nitrogen content of water insoluble portion per cent by weight, minimum 3.0 (vi)

Particle size–The material shall pass wholly through 2.36 mm IS sieve of which not more than 30 per cent shall be retained on 0.85 mm IS sieve.

5. Bone meal, Steamed

(i) Moisture per cent by weight, maximum 7.0

(ii) Total phosphates (as P_2O_5) per cent by weight, (on dry basis), minimum 22.0

(iii) 2 per cent citric acid soluble phosphates (as P_2O_5) per cent by weight, (on dry basis), minimum

16.0 (iv) Particle size – Not less than 90 per cent of the material shall pass through 1.18 mm IS sieve.

6. Rock phosphate

(i) Particle size – Minimum 90 per cent of the material shall pass through 0.15 mm IS sieve and the balance 10 per cent of material shall pass through 0.25 mm IS sieve.

(ii) Total phosphate (as P_2O_5) per cent by weight, minimum 18.0

7. Single Superphosphate (16% P_2O_5 Granulated)

(i) Moisture per cent by weight, maximum 5.0

(ii) Free phosphoric acid (as P_2O_5) per cent by weight, maximum 4.0

(iii) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 14.5

(iv) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall pass through 1 mm IS sieve.

(v) Sulphur (as S), per cent by weight, minimum. 11.0 (vi)

Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 16.0

8. Superphosphoric Acid (70%) P_2O_5 (Liquid)

(i) Total phosphate (as P_2O_5) per cent by weight, minimum 70.0

(ii) Polyphosphate (as P_2O_5) per cent by weight, minimum 18.9

(iii) Methanol insoluble matter, per cent weight, maximum 1.0 (iv)

Magnesium as MgO, percent by weight, maximum 0.5 (v)

Specific gravity (at 24^oC) 1.96

1(c). STRAIGHT POTASSIC FERTILISERS

1. Potassium Chloride (Muriate of Potash)

(i) Moisture per cent by weight, maximum 0.5

(ii) Water soluble potash content (as K_2O) per cent by weight, minimum 60.0

(iii) Sodium as NaCI per cent by weight (on dry basis), 3.5
maximum

(iv) Particle size – minimum 65 per cent of the material shall pass through 1.7 mm IS sieve and be retained on 0.25 mm IS sieve.

2. Potassium Sulphate

(i) Moisture per cent by weight, maximum 1.5

(ii) Potash content (as K_2O) per cent by weight, minimum 50.0

(iii) Total chlorides (as Cl) per cent by weight, (on dry basis), maximum 2.5 (iv)

Sodium as NaCl per cent by weight, (on dry basis), maximum 2.0 (v)

Sulphur (as S) per cent by weight, minimum. 17.5

3. Potassium Schoenite

(i) Moisture per cent by weight, maximum 1.5

(ii) Potash content (as K_2O) per cent by weight (on dry basis), minimum 23.0

(iii) Magnesium oxide (as MgO) per cent by weight, maximum 11.0

(iv) Sodium (as NaCl) (on dry basis) per cent by weight, maximum 1.5

4. Potassium Chloride (Muriate of Potash) (Granular)

(i) Moisture per cent by weight, maximum 0.5

(ii) Water soluble potash (as K_2O) per cent by weight, minimum 60.0

(iii) Sodium (as NaCl) per cent by weight, maximum 3.5

(iv) Magnesium (as $MgCl_2$) per cent by weight, maximum 1.0

(v) Particle size – Not less than 90 per cent of the material shall pass through 3.35 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve

5. Potash Derived from Molasses

(i) Moisture per cent by weight, maximum 4.79

(ii) Total nitrogen, per cent by weight, minimum 1.66

(iii) Neutral ammonium citrate soluble phosphate (as P_2O_5), per cent by weight, minimum 0.39

(iv) Water soluble potash (as K_2O), per cent by weight, minimum 14.70

1(cc). STRAIGHT SULPHUR FERTILISERS

1. Sulphur 90% (Powder)

(i) Moisture per cent by weight, maximum 1.0 (ii)

Total sulphur (as S) per cent by weight, minimum 90.0

2. Sulphur 90% (Granular)

(i) Moisture per cent by weight, maximum 0.5

(ii) Total sulphur (as S) per cent by weight, minimum 90.0

(iii) Particle size – Not less than 90 per cent of the material shall pass through 4.0 mm IS sieve and be retained on 1 mm IS sieve and not more than 5% shall be below 1 mm IS sieve.

(Note : the product may contain inert filler material as Bentonite etc. up to the extent of 10 per cent by weight, maximum)

1(d). N.P. COMPLEX FERTILISERS

1. Deleted vide S.O. 377(E) dt. 29.5.1992

2. Diammonium Phosphate (18-46-0)	2.5
(i) Moisture per cent by weight, maximum	18.0
(ii) Total nitrogen per cent by weight, minimum	15.5
(iii) Ammonical nitrogen form per cent by weight, minimum	2.5
(iv) Total nitrogen in the form of urea per cent by weight, maximum	46.0
(v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	41.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	1.0
(vii) Particle size – not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm size.	16.0 20.0 19.5
3. Ammonium Phosphate Sulphate (16-20-0)	
(i) Moisture per cent by weight, maximum	
(ii) Total ammoniacal nitrogen per cent by weight, minimum	
(iii) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	
(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	

(v) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	13.0
(vi) Sulphur (as S) per cent by weight, minimum	1.0
4. Ammonium Phosphate Sulphate (20-20-0)	20.0
(i) Moisture per cent by weight, maximum	18.0
(ii) Total nitrogen per cent by weight, minimum	2.0
(iii) Ammoniacal nitrogen per cent by weight, minimum	20.0
(iv) Nitrogen in the form of urea per cent by weight, maximum	17.0
(v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	13.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	1.5
(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve	20.0
(viii) Sulphur (as S) per cent by weight, minimum.	17.0
5. Ammonium Phosphate Sulphate Nitrate (20-20-0)	3.0
(i) Moisture per cent by weight, maximum	20.0
(ii) Total nitrogen per cent by weight, minimum	17.0
(iii) Ammoniacal nitrogen per cent by weight, minimum	13.0
(iv) Nitrate nitrogen per cent by weight, maximum	1.0
(v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	18.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	9.0
(vii) Sulphur (as S), per cent by weight, minimum	8.5
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	1.5
6. Ammonium Phosphate Sulphate (18-9-0)	20.0
(i) Moisture per cent by weight, maximum	10.0
(ii) Ammoniacal nitrogen per cent by weight, minimum	10.0
(iii) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	20.0
(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	
(v) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	
7. Nitro Phosphate (20-20-0)	
(i) Moisture per cent by weight, maximum	
(ii) Total nitrogen per cent by weight, minimum	
(iii) Nitrogen in ammoniacal form per cent by weight, minimum	
(iv) Nitrogen in nitrate form per cent by weight, maximum	

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum — 12.0
(vii) Calcium nitrate per cent by weight, maximum — 1.0
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve. — 1.5

8. Urea Ammonium Phosphate (28-28-0) — 28.0

(i) Moisture per cent by weight, maximum — 9.0
(ii) Total nitrogen per cent by weight, minimum — 28.0
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum — 25.2
(v) Water soluble phosphates (as P_2O_5) per rent by weight, minimum
(vi) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve

9. Urea Ammonium Phosphate (24-24-0)

(i) Moisture per cent by weight, maximum — 1.5
(ii) Total nitrogen per cent by weight, minimum — 24.0
(iii) Ammonical nitrogen per cent by weight, minimum (iv) — 7.5
Nitrogen in the form of urea per cent by weight, maximum — 16.5
(v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum — 24.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum — 20.4
(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

(Note: This product contains inert filler material such as sand or dolomite to the extent of 20% by weight, maximum)

10. Urea Ammonium Phosphate (20-20-0)

(i) Moisture per cent by weight, maximum — 1.5
(ii) Total nitrogen per cent by weight, minimum — 20.0
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv) — 6.4
Neutral ammonical citrate soluble phosphates (as P_2O_5) per cent by weight, minimum — 20.0
(v) Water soluble phosphates (as P_2O_5) per cent by weight, minimum — 17.0
(vi) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

(Note: This product contains filler material (inert soil) to the extent of 30 per cent by weight)

11. Mono Ammonium Phosphate (11-52-0)

(i) Moisture per cent by weight, maximum	1.0
(ii) Total nitrogen all in ammoniacal form per cent by weight, minimum	11.0
(iii) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	52.0
(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	44.2
(v) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve	

12. Omitted vide S.O. 1420 (E) dated 22.6.2012

13. Ammonium Nitrate Phosphate (23-23-0)

(i) Moisture per cent by weight, maximum	1.5
(ii) Total nitrogen per cent by weight, minimum	23.0
(iii) Nitrogen in ammoniacal form per cent by weight, minimum	13.0
(iv) Nitrogen in nitrate form per cent by weight, maximum	10.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	23.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	20.5
(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	10.0 34.0 22.1 0.5 1.4

14. Ammonium Poly-phosphate (10-34-0) (Liquid) 5.8-6.2

(i) Total nitrogen (all as ammoniacal nitrogen) per cent by weight, minimum	1.5
(ii) Total phosphate (as P_2O_5) per cent by weight, minimum	14.0
(iii) Poly-phosphate (as P_2O_5) per cent by weight, minimum	6.0
(iv) Magnesium (as MgO) per cent by weight, maximum	8.0
(v) Specific gravity (at 27°C)	28.0
(vi) pH	23.0

15. Ammonium Phosphate (14-28-0)

(i) Moisture per cent by weight, maximum	
(ii) Total nitrogen per cent by weight, minimum	
(iii) Urea nitrogen per cent by weight, maximum	
(iv) Ammoniacal nitrogen per cent by weight, minimum	
(v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	
(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be	

16. 13:33:0:15S

(i) Ammoniacal nitrogen per cent by weight, minimum	13.0
(ii) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	33.0
(iii) Water soluble phosphates (as P_2O_5), per cent by weight, minimum	30.0
(iv) Total sulphur (as S), per cent by weight, minimum	15.0
(v) Elemental sulphur (as S), per cent by weight, maximum	7.6
(vi) Sulphate sulphur (as S), per cent by weight, minimum	7.4

(vii) Moisture per cent by weight, maximum 1.0

(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.

17. Diammonium Phosphate (16:44:0)

(i) Moisture percent by weight, maximum 3.0

(ii) Total nitrogen per cent by weight, minimum 16.0

(iii) Ammonical nitrogen per cent by weight, minimum 14.0

(iv) Total nitrogen in the form of urea per cent by weight, maximum 2.0

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 44.0

(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 37.0

(vii) Particle size: Not less than 90 per cent of the material shall pass through 4 mm IS sieve and shall be retained on 1mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

18. Nitrophosphate (24-24-0)

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen per cent by weight, minimum 24.0

(iii) Nitrogen in ammoniacal form per cent by weight, minimum 13.5

(iv) Nitrogen in nitrate form per cent by weight, maximum 10.5

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 24.0

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 20.5

(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

1 (e). N.P.K. COMPLEX FERTILISERS

1. Nitrophosphate with Potash (15-15-15)

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen, per cent, minimum 15.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 7.5

(iv) Nitrate nitrogen per cent by weight, maximum 7.5 (v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum 15.0

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 4.0 (vii) Water soluble potash (as K_2O) per cent by weight, minimum 15.0 (viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve

(ix) Calcium nitrate per cent by weight, maximum 1.0

2. N.P.K. (10-26-26)

(i) Moisture per cent by weight, maximum 1.0 (ii) Total nitrogen per cent by weight, minimum 10.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 7.0

(iv) Nitrogen in the form of urea per cent by weight,

3.0
maximum

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 26.0

(vi) Water soluble potash (as K_2O) per cent by weight, minimum 26.0

(vii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 22.1

(viii) Particle size- Particle size of the material will be such that 90 per cent of the material will be between 1 mm and 4mm IS sieve and not more than 5 per cent will be below 1 mm size.

3. N.P.K. (12-32-16)

(i) Moisture per cent by weight, maximum 1.0 (ii) Total nitrogen per cent by weight, minimum 12.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 9.0

(iv) Nitrogen in the form of urea per cent by weight, maximum 3.0 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 32.0

(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 27.2

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 16.0 (viii)

Particle size -Particle size of the material will be such that 90 per cent of the material will be between 1 mm and 4 mm IS sieve and not more than 5 per cent will be below 1 mm size.

4. N.P.K (22-22-11)

(i) Moisture per cent by weight, maximum 1.5 (ii) Total nitrogen per cent by weight, minimum 22.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 7.0

(iv) Urea nitrogen per cent by weight, maximum 15.0 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 22.0

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 18.7

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 11.0

(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

5. N.P.K. (14-35-14)	1.0
(i) Moisture per cent by weight, maximum	14.0
(ii) Nitrogen in ammoniacal form per cent by weight, minimum	35.0
(iii) Omitted vide S.O. 1079 (E) dt. 11.12.1987	29.0
(iv) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum	14.0
(v) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	1.5
(vi) Water soluble potash (as K_2O) per cent by weight, minimum	17.0
(vii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	5.0 12.0 17.0 17.0 14.5
6. N.P.K. (17-17-17)	1.5
(i) Moisture per cent by weight, maximum	14.0
(ii) Total nitrogen per cent by weight, minimum	8.0
(iii) Ammoniacal nitrogen per cent by weight, minimum	6.0
(iv) Urea nitrogen per cent by weight, maximum	28.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	14.0
(vi) Water soluble potash (as K_2O) per cent by weight, minimum	23.8
(vii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	1.5 19.0
(viii) Particle size –Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than5 per cent shall be below 1 mm IS sieve.	5.6 13.4
7. N.P.K. (14-28-14)	
(i) Moisture per cent by weight, maximum	
(ii) Total nitrogen per cent by weight, minimum	
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv) Urea nitrogen per cent by weight, maximum	
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	
(vi) Water soluble potash (as K_2O) per cent by weight, minimum	
(vii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	
8. N.P.K. (19-19-19)	
(i) Moisture per cent by weight, maximum	
(ii) Total nitrogen per cent by weight, minimum	
(iii) Ammoniacal nitrogen per cent by weight, minimum	
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	19.0 (vi)
Water soluble phosphate (as P_2O_5) per cent by weight, minimum	16.2
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	19.0 (viii)
Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on	

1 mm IS sieve. Not more than 5 per cent shall be below 1mm IS sieve.

9. N.P.K. (17-17-17)

(i) Moisture per cent by weight, maximum 1.5 (ii) Total nitrogen per cent by weight, minimum 17.0

(iii) Ammonium nitrogen per cent by weight, minimum 8.5

(iv) Nitrate nitrogen per cent by weight, maximum 8.5 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 17.0

(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 13.6

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 17.0 (viii) Particle size – Not less than 80 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 20 per cent shall be above 4 mm IS sieve.

10. N.P.K.(20-10-10)

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen per cent by weight, minimum 20.0

(iii) Urea nitrogen percent by weight, maximum 17.1

(iv) Ammonical nitrogen percent by weight, minimum 3.9 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 10.0

(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 8.5

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 10.0

(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

11. N.P.K. (15:15:15)

(i) Moisture per cent by weight, maximum 1.5 (ii) Total nitrogen per cent by weight, minimum 15.0

(iii) Ammonical nitrogen percent by weight, minimum 12.0 (iv) Nitrogen in the form of urea, per cent by weight, maximum 3.0 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 15.0

(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 12.0

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 15.0

(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.

12. N.P.K. (15:15:15:9(S))

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen per cent by weight, minimum 15.0

(iii) Ammoniacal nitrogen percent by weight, minimum 12.0

(iv) Nitrogen in the form of urea per cent by weight, maximum 3.0

(v) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 12.0

(vi) Neutral ammonium citrate soluble phosphate (as P_2O_5)

per cent by weight, minimum 15.0

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 15.0

(viii) Sulphur (as S) per cent by weight minimum 9.0

(ix) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.

13. N.P.K. (12:11:18 with MgO)

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen per cent by weight, minimum 12.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 7.0

(iv) Nitrate nitrogen per cent by weight, maximum 5.0

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 11.0

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 7.7

(vii) Water soluble potash (as K_2O), per cent by weight, minimum 18.0

(viii) Magnesium (as Mg) per cent by weight, minimum 1.2

(ix) Sulphur (as S) per cent by weight, minimum 7.6

(ix) Total chlorides (as Cl) percent by weight, maximum 1.0

(xi) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.

14. N.P.K. 16:16:16

(i) Moisture per cent by weight, maximum 1.5

(ii) Total nitrogen per cent by weight, minimum 16.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 8.0

(iv) Nitrate nitrogen per cent by weight, maximum 8.0

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 16.0

(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 12.0

(vii) Water soluble potash (as K_2O) per cent by weight, minimum 16.0

(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.

15. N.P.K. 9:25:25

(i) Moisture per cent by weight, maximum 1.0

(ii) Total nitrogen per cent by weight, minimum 9.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 6.0

(iv) Nitrate nitrogen per cent by weight, maximum 3.0

(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) 25.0

per cent by weight, minimum	21.25
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	25.0
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	1.5
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve.	14.0
16. Nitrophosphate with Potash (14-14-21)	8.0
(i) Moisture per cent by weight, maximum	6.0
(ii) Total nitrogen per cent by weight, minimum	14.0
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv) Nitrate nitrogen per cent by weight, minimum	9.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	21.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	1.5
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	21.0
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	10.5
17. Nitrophosphate with Potash (21-06-13)	10.5
(i) Moisture per cent by weight, maximum	6.0
(ii) Total nitrogen per cent by weight, minimum	3.7
(iii) Ammonical nitrogen per cent by weight, minimum (iv) Nitrate nitrogen per cent by weight, minimum	13.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	1.5
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	15.0
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	8.5
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	6.5
18. Nitrophosphate with Potash Grade II (15-15-15)	15.0
(i) Moisture per cent by weight, maximum	9.8
(ii) Total nitrogen per cent by weight, minimum	15.0
(iii) Ammonical nitrogen per cent by weight, minimum (iv) Nitrate nitrogen per cent by weight, minimum	3.4
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	3.4
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	
18. Nitrophosphate with Potash Grade II (15-15-15)	
(i) Moisture per cent by weight, maximum	
(ii) Total nitrogen per cent by weight, minimum	
(iii) Ammonical nitrogen per cent by weight, minimum (iv) Nitrate nitrogen per cent by weight, minimum	
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	
(x) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	1.5 15.0 8.3

19. Nitrophosphate with Potash Grade (15-9-20)	6.7
(i) Moisture per cent by weight, maximum	9.0
(ii) Total nitrogen per cent by weight, minimum	5.9
(iii) Ammonical nitrogen per cent by weight, minimum (iv) Nitrate nitrogen per cent by weight, minimum	20.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	3.4
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	0.7
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	
(viii) Sulphur (as S) per cent by weight, minimum	
(ix) Magnesium (as Mg) per cent by weight, minimum (x) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1 mm sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	

1 (f) MICRONUTRIENTS

1. Zinc Sulphate Heptahydrate ($ZnSO_4.7H_2O$)	1.0
(i) Omitted vide S.O. 49(E) dt. 16.01.2003	21.0
(ii) Matter insoluble in water per cent by weight, maximum	0.003
(iii) Zinc (as Zn) per cent by weight, minimum	0.1
(iv) Lead (as Pb) per cent by weight, maximum	0.5
(v) Copper (as Cu) per cent by weight, maximum	4.0
(vi) Magnesium (as Mg) per cent by weight, maximum	10.0
(vii) pH not less than	0.0025
(viii) Sulphur (as S) per cent by weight, minimum	0.01
(ix) Cadmium (as Cd) per cent by weight, maximum	1.2
(x) Arsenic (as As) per cent by weight, maximum	
2. Manganese Sulphate	30.5
(i) Free flowing form	0.003
(ii) Matter insoluble in water per cent by weight, maximum	0.1
(iii) Manganese (as Mn) content per cent by weight, minimum	2.0
(iv) Lead (as Pb) per cent by weight, maximum	4.0
(v) Copper (as Cu) per cent by weight, maximum	17.0
(vi) Magnesium (as Mg) per cent by weight, maximum	
(vii) pH not less than	
(viii) Sulphur (as S) per cent by weight, minimum	

3. Borax (Sodium Tetraborate) ($Na_2B_4O_7.10H_2O$) for Soil Application

(i) Content of boron as (B) per cent by weight, minimum (ii) Matter insoluble in water per cent by weight, maximum	10.5 1.0
(iii) pH	9.0-9.5
(iv) Lead (as Pb) per cent by weight, maximum	0.003

4. Omitted vide S.O. 413 (E) dt. 07.04.2003

5. Copper Sulphate ($CuSO_4.5H_2O$)

(i) Copper (as Cu) per cent by weight, minimum	24.0
(ii) Matter insoluble in water per cent by weight, maximum (iii) Soluble iron and aluminium compounds (expressed as Fe) per cent by weight, maximum	1.0 0.5
(iv) Lead (as Pb) per cent by weight, maximum	0.003
(v) pH not less than	3.0
(vi) Sulphur (asS) per cent by weight, minimum	12.0
6. Ferrous Sulphate ($FeSO_4.7H_2O$)	19.0
(i) Ferrous iron (as Fe) per cent by weight, minimum (ii) Free acid (as H_2SO_4) per cent by weight, maximum (iii) Ferric iron (as Fe) per cent by weight, maximum	1.0 0.5 1.0
(iv) Matter insoluble in water, per cent by weight, maximum	3.5
(v) pH not less than	0.003
(vi) Lead (as Pb) per rent by weight, maximum	10.5
(vii) Sulphur (as S) percent by weight, minimum	52.0
7 . Ammonium Molybdate ($(NH_4)_6Mo_7O_{24}.4H_2O$)	1.0
(i) Molybdenum (as Mo) per cent by weight, minimum (ii) Matter insoluble in water per cent by weight, maximum (iii) Lead (as Pb) per cent by weight, maximum	0.003 12.0 0.003
8. Chelated Zinc as Zn-EDTA	6.0-6.5
(i) Appearance – Free flowing crystalline or powder or Tablet	12.0
(ii) Zinc content (Expressed as Zn), per cent by weight minimum in the form of Zn-EDTA	0.003 5.5-6.5
(iii) Lead (as Pb) per cent by weight maximum	1.0
(iv) pH	33.0
9. Chelated Iron as Fe-EDTA	0.003
(i) Appearance – Free flowing crystalline / powder	0.1
(ii) Iron content (expressed as Fe), per cent by weight minimum in the form of Fe-EDTA	0.5 1.0
(iii) Lead (as Pb) per cent by weight, maximum	4.0
(iv) pH	15.0
10. Zinc Sulphate Mono-hydrate ($ZnSO_4.H_2O$)	0.0025
(i) Free flowing powder form	0.01
(ii) Matter-insoluble in water per cent by weight, maximum	
(iii) Zinc (as Zn) per cent by weight. minimum	
(iv) Lead (as Pb) per cent by weight, maximum	
(v) Copper (as Cu) per cent by weight, maximum	
(vi) Magnesium (as Mg) per cent by weight, maximum (vii) Iron (as Fe) per cent by weight, maximum	
(viii) pH not less than	
(ix) Sulphur (as S) per cent by weight, minimum	
(x) Cadmium (as Cd) per cent by weight, maximum	
(xi) Arsenic (as As) per cent by weight, maximum	
11. Magnesium Sulphate	
(i) Free flowing – crystalline form	
(ii) Matter insoluble in water per cent by weight, maximum	1.0
(iii) Magnesium (as Mg) per cent by weight, minimum	9.6
(iv) Lead (as Pb) per cent by weight, maximum	0.003
(v) pH (5% solution)	5.0-8.0
(vi) Sulphur (as S) per cent by weight, minimum	12.0
12. Boric Acid (H_3BO_3)	
(i) Boron (as B) per cent weight, minimum	17.0
(ii) Matter insoluble in water per cent by weight, maximum	1.0
(iii) Lead (as Pb) per cent by weight, maximum	0.003

13. Di-Sodium Octa Borate Tetra Hydrate ($Na_2B_8O_{13}.4H_2O$)

(i) Boron (as B) per cent weight, minimum	20.0
(ii) Matter insoluble in water per cent by weight, maximum	1.0
(iii) Lead (as Pb) per cent by weight, maximum	0.003

14. Di-Sodium Tetra Borate Penta Hydrate

(i) Boron (as B) per cent weight, minimum	15.0
(ii) Matter insoluble in water per cent by weight, maximum	1.0
(iii) Lead (as Pb) per cent by weight, maximum	0.003
(iv) Arsenic (as As) per cent by weight, maximum	0.01
(v) Particle size – Not less than 95% of the material shall pass through 5 mm IS sieve and be retained on 1.4 mm IS sieve.	

15. Zinc Sulphate Monohydrate (Granular)

(i) Matter-insoluble in water per cent by weight, maximum	1.0
(ii) Zinc (as Zn) per cent by weight, minimum	33.0
(iii) Lead (as Pb) per cent by weight, maximum	0.003
(iv) Copper (as Cu) per cent by weight, maximum	0.1
(v) Magnesium (as Mg) per cent by weight, maximum	0.5
(vi) Iron (as Fe) per cent by weight, maximum	1.0
(vii) pH not less than	4.0
(viii) Sulphur (as S) per cent by weight, minimum	15.0
(ix) Cadmium (as Cd) per cent by weight, maximum	0 .0025
(x) Arsenic (as As) per cent by weight, maximum	0.01
(xi) Particle size – Not less than 90 per cent of the material shall pass through 4mm IS sieve and be retained on 2mm IS sieve. Not more than 5 per cent shall be below 2 mm IS sieve.	

1(g). FORTIFIED FERTILISERS

1. Boronated Single Superphosphate (16% P_2O_5 Powdered) 12.0

(i) Moisture per cent. by weight, maximum	4.0
(ii) Free phosphoric acid (as P_2O_5) per cent by weight, maximum	16.0 0.15-0.20
(iii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	11.0 1.0
(iv) Boron (as B) per cent by weight	
(v) Sulphur (as S) per cent by weight, minimum	

2. Zincated Urea

(ii) Total nitrogen per cent by weight, (on dry basis), minimum 43.0 (iii) Zinc (as Zn) per cent by weight, minimum 2.0 (iv) Biuret, per cent by weight, maximum 1.5 (v)

Particle Size – Not less than 90 per cent of the material shall pass through 2.8 mm IS sieve and not less than 80 per cent by weight shall be retained on 1mm IS sieve.

3. Zincated Phosphate (Suspension) – for Seed Treatment

(i) Total phosphate (as P_2O_5) per cent by weight, minimum	13.9
(ii) Total zinc (Zn) per cent by weight, minimum	17.6 (iii)
Neutral ammonium citrate soluble phosphate as (P_2O_5) per cent by weight, minimum	2.8
(iv) Lead (as Pb) per cent by weight, maximum	0.003 (v)
pH	8±1

4. NPK Complex Fertiliser Fortified with Boron (10:26:26:0.3)

(i) Moisture per cent by weight, maximum 1.0 (ii) Total nitrogen per cent by weight, minimum 10.0

(iii) Ammoniacal nitrogen per cent by weight, minimum 7.0 (iv) Urea nitrogen (as N) per cent by weight, maximum 3.0 (v) Neutral ammonium citrate soluble phosphate as (P_2O_5) percent by weight, minimum 26.0 (vi) Water soluble phosphate as (P_2O_5) per cent by weight, minimum 22.1 (vii) Water soluble potash (as K_2O) per cent by weight, minimum 26.0 (viii) Boron (as B) per cent by weight, minimum 0.3 (ix) Particle size – Not less than 90 per cent of the material shall be between 1 mm and 4 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.

5. NPK Complex Fertiliser Fortified with Boron (12:32:16:0.3)

(i) Moisture per cent by weight, maximum 1.0
(ii) Total nitrogen per cent by weight, minimum 12.0
(iii) Ammoniacal nitrogen per cent by weight, minimum 9.0
(iv) Nitrogen in the form of urea per cent by weight, maximum 3.0
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum 32.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 27.2
(vii) Water soluble potash (as K_2O) per cent by weight, minimum 16.0
(viii) Boron (as B) per cent by weight, minimum 0.3
(ix) Particle size – Particle size of the material will be such that 90 per cent of the material will be between 1 mm and 4 mm IS sieve and not more than 5 per cent will be below 1 mm IS sieve.

6. Diammonium Phosphate Fortified with Boron (18:46:0: 0.3)

(i) Moisture per cent by weight, maximum 1.5
(ii) Total nitrogen per cent by weight, minimum 18.0
(iii) Ammoniacal nitrogen per cent by weight, minimum 15.5
(iv) Nitrogen in the form of urea per cent by weight, maximum 2.5 (v) Neutral ammonium citrate soluble phosphates (as P_2O_5) per cent by weight, minimum 46.0 (vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 41.0 (vii) Boron (as B) per cent by weight, minimum 0.3 (viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and be retained on 1mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.

7. NPK Complex Fertiliser Fortified with Zinc (10:26:26:0.5)

(i) Moisture per cent by weight, maximum 1.5 (ii) Total nitrogen per cent by weight, minimum 10.0 (iii) Ammonical nitrogen per cent by weight, minimum 7.0 (iv) Urea nitrogen (as N) per cent by weight, maximum 3.0 (v) Neutral ammonium citrate soluble phosphate (as P_2O_5) 26.0 (vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 20.0 (vii) Water soluble potash (as K_2O) per cent by weight, minimum 26.0 (viii) Zinc (as Zn) per cent by weight, minimum 0.5 Particle size – Not less than 90 per cent of the material shall be retained

between 1 mm and 4 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.

8. NPK Complex Fertiliser Fortified with Zinc (12:32:16:0:0.5)

(i) Moisture per cent by weight, maximum	1.5
(ii) Total nitrogen per cent by weight, minimum	12.0
(iii) Ammonical nitrogen per cent by weight, minimum (iv)	9.0
Urea nitrogen (as N) per cent by weight, maximum (v)	3.0
Neutral ammonium citrate soluble phosphate (as P_2O_5), per cent by weight, minimum	32.0 25.0
(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	16.0
(vii) Water soluble potash (as K_2O) per cent by weight, minimum	0.5
(viii) Zinc (as Zn) per cent by weight, minimum	
Particle size - Not less than 90 per cent of the material shall be retained between 1 mm and 4 mm IS sieve and not more than 5 per cent shall be below 1 mm IS sieve.	

9. Calcium Nitrate with Boron

(i) Total nitrogen per cent by weight, minimum	14.60
(ii) Ammonical nitrogen per cent by weight, maximum (iii)	1.1
Nitrate nitrogen as N per cent by weight, minimum (iv)	13.5
Water soluble calcium as per cent by weight, minimum (v)	17.1
Boron (as B) per cent by weight, minimum	0.250

10. Nitrophosphate with Potash fortified with Boron (15:15:15 : B 0.2)

(i) Moisture per cent by weight, maximum	1.5
(ii) Total nitrogen per cent by weight, minimum	15.0
(iii) Ammonical nitrogen per cent by weight, minimum	7.5
(iv) Nitrate nitrogen per cent by weight, maximum	7.5
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	15.0 4.0
(vi) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	15.0
(vii) Water soluble potash (as K_2O_5) per cent by weight, minimum	0.2 1.0
(viii) Boron (as B) per cent by weight, minimum	
(ix) Calcium nitrate per cent by weight, maximum	
(x)	
Particle size – Not less than 90 per cent of the material shall	

11. DAP Fortified with Zinc (18:46:0:0.5)

(i) Moisture per cent by weight, maximum	2.5
(ii) Total nitrogen per cent by weight, minimum	18.0
(iii) Ammonical nitrogen per cent by weight, minimum	15.5
(iv) Urea nitrogen per cent by weight, maximum	2.5
(v) Neutral ammonium citrate soluble phosphate (as P_2O_5) per cent by weight, minimum	46.0 41.0
(vi) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	0.5
(vii) Zinc (as Zn) per cent by weight, minimum	
(viii) Particle size – Not less than 90 per cent of the material shall pass through 4 mm IS sieve and retained on 1mm IS sieve. Not more than 5 per cent shall be below 1 mm IS sieve.	

1(h) 100% WATER SOLUBLE COMPLEX FERTILISERS

1. Potassium Nitrate (13-0-45)

(i) Omitted vide S.O. 540 (E) dt. 12.5.2003

(ii) Moisture per cent by weight maximum 0.5
(iii) Total nitrogen (all in Nitrate form) per cent by weight, minimum 13.0
(iv) Water soluble potash (as K_2O) per cent by weight, minimum 45.0
(v) Sodium (as Na) (On dry basis) per cent by weight, maximum. 1.0
(vi) Total chloride(as Cl) (On dry basis) per cent by weight, maximum 1.5
(vii) Matter insoluble in water, per cent by weight, maximum 0.05

2. Omitted vide S.O. 540 (E) dt. 12.5.2003

3. Mono – Potasium Phosphate (0-52-34) (100% water Soluble)

(i) Moisture per cent by weight, maximum 0.5
(ii) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 52.0
(iii) Water soluble potash (as K_2O) per cent by weight, minimum 34.0
(iv) Sodium (as NaCl) per cent by weight (on dry basis), maximum 0.025

4. Calcium Nitrate

(i) Total nitrogen per cent by weight, minimum 15.5
(ii) Ammoniacal nitrogen per cent by weight, maximum 1.1
(iii) Nitrate nitrogen as N per cent by weight, minimum 14.4
(iv) Water soluble calcium as per cent by weight, minimum 18.8
(v) Matter insolubles in water per cent by weight, maximum 1.5

5. NPK 13:40:13 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum 13.0
(ii) Nitrate nitrogen per cent by weight, maximum 4.4
(iii) Ammoniacal nitrogen per cent by weight, minimum 8.6
(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 40.0
(v) Water soluble potash as K_2O, per cent by weight, minimum 13.0
(vi) Sodium (as NaCl), per cent by weight. on dry basis, maximum 0.15
(vii) Matter insoluble in water per cent by weight, maximum 0.5

6. NPK 18:18:18 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum 18.0
(ii) Nitrate nitrogen per cent by weight, maximum 9.8
(iii) Ammoniacal nitrogen per cent by weight, minimum 8.2
(iv) Water soluble phosphate (as P_2O_5) per cent by weight, minimum 18.0
(v) Water soluble potash (as K_2O) per cent by weight, minimum 18.0
(vi) Sodium as NaCl per cent by weight on dry basis, maximum 0.25
(vii) Matter insoluble in water per cent by weight, maximum 0.5

7. NPK 13:5:26 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum 13.0
(ii) Nitrate nitrogen per cent by weight, maximum 7.0
(iii) Ammoniacal nitrogen per cent by weight, minimum 6.0
(iv) Water soluble phosphates (as P_2O_5) per cent by weight, minimum 5.0
(v) Water soluble potash as K_2O per cent by weight, minimum. 26.0
(vi) Sodium as NaCl per cent by weight, on dry basis maximum 0.3
(vii) Matter insoluble in water per cent by weight, maximum. 0.5

8. NPK 6:12:36 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum	6.0
(ii) Nitrate nitrogen per cent by weight, maximum	4.5
(iii) Ammoniacal nitrogen per cent by weight, minimum (iv)	1.5
Water soluble phosphates (as P_2O_5) per cent by weight, minimum	12.0
(v) Water soluble potash per cent by weight, minimum.	36.0
(vi) Sodium as NaCl per cent by weight, maximum	0.5
(vii) Matter insoluble in water per cent by weight, maximum	0.5

9. NPK 20:20:20 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum	20.0
(ii) Nitrate nitrogen per cent by weight, maximum	4.9
(iii) Ammoniacal nitrogen, per cent by weight, minimum	3.0
(iv) Urea nitrogen per cent by weight, maximum	12.1
(v) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	20.0
(vi) Water soluble potash as K_2O per cent by weight, minimum	20.0
(vii) Sodium as NaCl per cent by weight on dry basis, maximum	0.06
(viii) Matter insoluble in water per cent by weight, maximum	0.5

10. Potassium Magnesium Sulphate

(i) Moisture per cent by weight, maximum	0.5
(ii) Potash content (as K_2O) per cent by weight, minimum	22.0
(iii) Magnesium as MgO per cent by weight, minimum (iv)	18.0
Total chloride (as Cl) per cent by weight (on dry basis), maximum	2.5
(v) Sodium (as NaCl) per cent by weight (on dry basis), maximum	2.0
(vi) Sulphur (as S) per cent by weight, minimum	20.0

11. NPK 19 :19:19 (100% Water Soluble)

(i) Total nitrogen per cent by weight, minimum	19.0
(ii) Nitrate nitrogen per cent by weight, maximum	4.0
(iii) Ammoniacal nitrogen per cent by weight, minimum	4.5
(iv) Urea nitrogen per cent by weight, maximum	10.5
(v) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	19.0
(vi) Water soluble potash (as K_2O) per cent by weight, minimum	19.0
(vii) Sodium as NaCl per cent by weight on dry basis, maximum	0.5
(viii) Matter insoluble in water per cent by weight, maximum	0.5
(ix) Moisture percent by weight, maximum	0.5

12. Mono Ammonium Phosphate 12:61:0 (100% Water Soluble)

(i) Moisture per cent by weight, maximum	0.5
(ii) Ammoniacal nitrogen per cent by weight, minimum (iii)	12.0
Water soluble phosphates (as P_2O_5) per cent by weight, minimum	61.0
(iv) Sodium as NaCl per cent by weight, maximum	0.5
(v) Matter insoluble in water per cent by weight, maximum	0.5

13. Urea Phosphate 17:44:0 (100% Water Soluble)

(i) Moisture per cent by weight, maximum	0.5
(ii) Total nitrogen per cent by weight, minimum	17.0
(iii) Water soluble phosphates (as P_2O_5) per cent by weight, minimum	44.0
(iv) Matter insoluble in water per cent by weight, maximum	0.5

14. NPK 12:30:15 (100% Water Soluble)

(i) Moisture per cent by weight, maximum	0.5
(ii) Urea nitrogen per cent by weight, minimum	12.0
(iii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	30.0
(iv) Water soluble potash (as K_2O) per cent by weight, minimum	15.0
(v) Sulphur (as S) per cent by weight, minimum	5.2
(vi) Matter insoluble in water, per cent by weight, maximum	0.5

15. NPK 12:32:14 (100% Water Soluble)

(i) Moisture per cent by weight, maximum	0.5
(ii) Urea nitrogen per cent by weight, minimum	12.0
(iii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	32.0
(iv) Water soluble potash (as K_2O) per cent by weight, minimum	14.0
(v) Sulphur (as S) per cent by weight, minimum	4.8
(vi) Matter insoluble in water, per cent by weight, maximum	0.5

16. Urea Phosphates with SOP 18:18:18 (100% Water Soluble)

(i) Moisture per cent by weight, maximum	0.5
(ii) Urea nitrogen per cent by weight, minimum	18.0
(iii) Water soluble phosphate (as P_2O_5) per cent by weight, minimum	18.0
(iv) Water soluble potash (as K_2O) per cent by weight, minimum	18.0
(v) Sulphur (as S) per cent by weight, minimum	6.1
(vi) Matter insoluble in water, per cent by weight, maximum	0.5

17. NPK Zn (7.6:23.5:7.6:3.5)

(i) Moisture per cent by weight, maximum	0.5
(ii) Total nitrogen per cent by weight, minimum	7.6
(iii) Nitrate nitrogen per cent by weight, maximum	2.8
(iv) Ammonical nitrogen per cent by weight, minimum (v)	5.0
Water soluble phosphate (as P_2O_5) per cent by weight, minimum	23.5
(vi) Water soluble potash (as K_2O) per cent by weight, minimum	7.6
(vii) Water soluble Zinc (as Zn EDTA) per cent by weight, minimum	3.5
(viii) Sodium (as NaCl) per cent by weight, on dry basis, maximum	0.15
(ix) Matter insoluble in water per cent by weight, maximum	0.5

1(i). P.K. FERTILISERS

Omitted vide S.O. 49 (E) dt. 16.01.2003

1(j).POTASSIUM MAGNESIUM COMPLEX FERTILISERS

Omitted vide S.O. 342 (E) dt. 18.03.2005

1(k). NITROGEN CALCIUM FERTILISERS

Omitted vide S.O. 49 (E) dt. 16.01.2003

PART-B

TOLERANCE LIMIT IN PLANT NUTRIENT AND PHYSICAL PARAMETERS FOR VARIOUS FERTILISERS

1 For fertilisers with definite compounds like ammonium sulphate, urea, ammonium chloride, muriate of potash, sulphate of potash, superphosphate, dicalcium phosphate, sulphur powder and sulphur granular which contain more than 20 percent plant nutrients	Nutrients 0.2
For those which contain less than 20 per cent nutrients	0.1 plant
2. For calcium ammonium nitrate	0.3
3 For diammonium phosphate	0.5 units each for N & P contents

4. For nitrophosphate, ammonium sulphate nitrate, urea ammoniun phosphate, ammonium phosphate sulphate, bonemeal, granulated mixture, compound/complex fertilisers/ 100% water soluble fertilisers/physical mixtures of fertilisers (NPK mixtures), mixtures of NPK with micronutrients

Tolerance varies with nutrient level in fertiliser subject to maximum of 2 per cent for all combined nutrients :-

Nutrient level (%)	Tolerance level (unit)
15 or less	0.5
16 to 20	0.6
21 or more	0.7

5. For borax, chelated zinc-EDTA and chelated iron-EDTA	0.1
6 For solubor, copper sulphate, zinc sulphate, manganese sulphate and ferrous sulphate	0.2
7. For ammonium molybdate	0.5
8. For magnesium sulphate	0.1

9. For mixture of micronutrient fertilisers

Tolerance varies with combined nutrient level in fertiliser

Nutrient level (%)	Tolerance level (unit)
10 or less	0.1
11 to 20	0.2
21 or more	0.5

10. Particle size	3 units
11. Moisture	0.3 units

12. For Customized fertilizers and fortified fertilizer

Nutrient level % for primary nutrient (N.P.K.) and secondary nutrient (S, Ca, Mg)]	Tolerance limits varies with nutrient level subject to maximum of 3% of all combined nutrients
Up to 15	0.5
>15 and upto 20	0.6
>20	0.7

(for micronutrients)	Toterance level (unit)
Up to 1.0 total combined units	0.1
>1.0 total combined units	0.2

Note : for the purpose of entry 12 –

(1) The minimum level of Sulphur in customized fertilisers as well as in fortified fertilizers should not be less than 4.0% and the minimum level of micronutrients in such fertilizers should be minimum 0.2%.

(2) The tolerance limits shall also be applicable on the forms of nutrients and in all the customized/fortified fertilizers, the forms of nutrients should also be specified along with the total nutrients".

"Schedule III

1.Rhizobium

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based
(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5
(v)	Particle size in case of carrier based material	All material shall pass through 0.15-0.212 mm IS sieve
(vi)	Moisture per cent by weight, maximum in case of carrier based.	30-40%
(vii)	Efficiency character	Should show effective nodulation on all the species listed on the packet.

Type of carrier:

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favouring growth of the organism.

2. Azotobacter

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based

(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5
(v)	Particle size in case of carrier based material	All material shall pass through 0.15-0.212 mm IS sieve
(vi)	Moisture per cent by weight, maximum in case of carrier based.	30-40%
(vii)	Efficiency character	The strain should be capable of fixing at least 10 mg of nitrogen per g of sucrose consumed..

Type of carrier:

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favouring growth of the organism.

3.Azospirillum

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based
(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material
		or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5
(v)	Particle size in case of carrier based material	All material shall pass through 0.15-0.212 mm IS sieve
(vi)	Moisxture per cent by weight, maximum in case of carrier based.	30-40%
(vii)	Efficiency character	Formation of white pellicle in semisolid nitrogen free bromothymol blue media.

Type of carrier:

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favouring growth of the organism.

4. Phosphate Solubilising Bacteria

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based
(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5 for moist / dry powder granulated carrier based and 5.0-7.5 for liquid based.

(v)	Particle size in case of carrier based material	All material shall pass through 0.15-0.212 mm IS sieve
(vi)	Moisture per cent by weight, maximum in case of carrier based.	30-40%
(vii)	Efficiency character	The strain should have phosphate solubilizing capacity in the range of minimum 30%, when tested spectrophotomatrically. In terms of zone formation, minimum 5mm solubilisation zone in prescribed media having at least 3 mm thickness.

Type of carrier:

The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favouring growth of the organism.

5.Mycorrhizal Biofertilisers

(i)	Form/Base	Fine powder/tablets/granules/root biomass mixed with growing substrate.
(ii)	Particle size in case of carrier based material	90% shall pass through 250 micron IS sieve powder formulations (60 BSS)
(iii)	pH	6.5 – 7.5
(iv)	Moisture content per cent maximum	8-12
(v)	Total viable propagules/g of product, maximum	100/gm of finished product.
(vi)	Infectivity potential	80 infection points in test root/gm of micorrhizal inoculum used.

6. Potassium Mobilising Biofertilisers (KMB)

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based
(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material on dry weight basis or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5 for carrier based in the form of powder or granules and 5.0-7.5 for liquid basis
(v)	Particle size in case of carrier based material	Powder material shall pass through 0.15 to 0.212 mm IS sieve
(vi)	Moisture per cent by weight, maximum in case of powder based	30-40
(vii)	Efficiency character	Minimum 10 mm solubilisation zone in prescribed media having at least 3 mm thickness.

Type of carrier:
The carrier material such as peat, lignite, peat soil, humus, wood charcoal or similar material favouring growth of the organism.

7.Zinc Solubilising Biofertilisers (ZMB)

(i)	Base	Carried based in form of moist/dry powder or granules or liquid based
(ii)	Visual cell count	CFU minimum $5x10^7$ cell/g of powder, granules or carrier material on dry weight basis or $1x10^8$ cell/ml of liquid.
(iii)	Contamination level	No contamination at 10^5 dilution
(iv)	pH	6.5 – 7.5 for carrier based in the form of powder or granules and 5.0-7.5 for liquid basis
(v)	Particle size in case of carrier based material	Powder material shall pass through 0.15 to 0.212 mm IS sieve
(vi)	Moisture content per cent by weight, maximum in case of carrier based.	30-40
(vii)	Efficiency character	Minimum 10 mm solubilisation zone in prescribed media having at least 3
		mm thickness

PART B

TOLERANCE LIMIT OF PHOFERTILISERS

1.In case of Rhizobium, Azotobacter, Azospirillum and Phosphate Solubilising. Becteria, the total viable count shall not be less than $1x10^7$ CFU/gm of carrier material in the form of powder or granules or $5x10^7$ CFU/ml in case of liquid formulations during the entire period of shelf life.

2.In case of Mycorrhizal Biofertilisers, the viable propagules shall not less than 80 per gram.

PART C

'PROCEDURE FOR DRAWAL OF SAMPLE OF BIOFERTILISERS –

PROCEDURE FOR SAMPLING OF BIOFERTILIZERS', -

"1. General Requirements of Sampling

1.0 In drawing, preparing and handling the samples, the following precautions and directions shall be observed.

1.1 Sampling shall be carried out by a trained and experienced person as it is essential that the sample should be representative of the lot to be examined.

1.2 Samples in their original unopened packets should be drawn and sent to the laboratory to prevent possible contamination of sample during handling and to help in revealing the true condition of the material.

1.3 Intact packets shall be drawn from a protected place not exposed to dampness, air, light, dust or soot."

2. Scale of Sampling

2.1 Lot

All units (containers in a single consignment of type of material belonging to the same batch of manufacture) shall constitute a lot. If a consignment consists of different batches of the manufacture the containers of the same batch shall be separated and shall constitute a separate lot.

2.2 Batch

All inoculant prepared from a batch fermentor or a group of flasks (containers) constitute a batch.

2.3 For ascertaining conformity of the material to the requirements of the specification, samples shall be tested from each lot separately.

2.4 The number of packets to be selected from a lot shall depend on the size of the lot and these packets shall be selected at random and in order to ensure the randomness of selection procedure given in IS 4905 may be followed."

"3. Drawal of Samples

3.1 The Inspector shall take three packets as sample from the same batch. Each sample constitutes a test sample.

3.2 These samples should be sealed in cloth bags and be sealed with the Inspector's seal after putting inside Form P. Identifiable details such as sample number, code number or any other details which enable its identification shall be marked on the cloth bags.

3.3 Out of the three samples collected, one sample so sealed shall be sent to incharge of the laboratory notified by the State Government under clause 29 or to National Centre for Organic Farming or to any of its Regional Centres. Another sample shall be given to the manufacturer or importer or dealer as the case may be. The third sample shall be sent by the inspector to his next higher authority for keeping in safe custody. Any of the latter two samples shall be sent for referee analysis under sub- clause (2) of clause 29B.

3.4 The number of samples to be drawn from the lot

Lot/Batch	**Number of Samples**

Upto 5,000 packets	03
5,001-10,000 packets	04
More than 10,000 packets	05

"1 City Compost

(i)	Moisture per cent. by weight	15.0-25.0
(ii)	Colour	Dark brown to black
(iii)	Odour	Absence of foul odour
(iv)	Particle size	Minimum 90% material should pass through 4.0mm IS sieve
(v)	Bulk density (g/cm^3)	<1.0
(vi)	Total organic Carbon, per cent. by weight, minimum	12.0
(vii)	Total Nitrogen (as N) per cent. by weight, minimum	0.8
(viii)	Total Phosphates (as P_2O_5)per cent. by weight minimum	0.4
(ix)	Total Potash (as K_2O) per cent by weight, minimum	0.4
(x)	C: N ratio	<20
(xi)	pH	6.5-7.5
(xii)	Conductivity (as dsm^{-1}) not more than	4.0
(xiii)	Pathogen	Nil
(xiv)	(xiv) Heavy metal content (as mg/kg) Per cent. by weight maximum	
	Arsenic (as As_2O_3)	10.00
	Cadmium (as Cd)	5.00
	Chromium (as Cr)	50.00
	Copper (as Cu)	300.00
	Mercury (as Hg)	0.15
	Nickel (as Ni)	50.00
	Lead (as Pb)	100.00
	Zinc (as Zn)	1000.00.";

"2 Vermic Compost

(i)	Moisture per cent. by weight	15.0-25.0
(ii)	Colour	Dark brown to black
(iii)	Odour	Absence of foul odour
(iv)	Particle size	Minimum 90% material should pass through 4.0mm IS sieve
(v)	Bulk density (g/cm^3)	0.7-0.9
(vi)	Total organic Carbon, per cent. by weight, minimum	18.0

(vii)	Total Nitrogen (as N) per cent. by weight, minimum	1.0
(viii)	Total Phosphates (as P_2O_5)per cent. by weight minimum	0.8
(ix)	Total potassium (as K2O) per cent by weight, minimum	0.8
(x).	Heavy metal content (as mg/kg) per cent. by weight maximum Cadmium (as Cd) Chromium (as Cr) Nickel (as Ni) Lead (as Pb)	 5.00 50.00 50.00 100.00

"3 Phosphate Rich Organic Manure (PROM)

	Moisture per cent. by weight, maximum	25.0
(i)	Particle size	Minimum 90% material should pass through 4.0mm IS sieve
(ii)	Bulk density (g/cm_3)	less than1.6
(iii)	Total organic Carbon, per cent. by weight, minimum	7.9
(iv)	Total Nitrogen (as N) per cent. by weight, minimum	0.4
(v)	Total Phosphates (as P_2O_5)per cent. by weight minimum	10.4
(vi)	C: N ratio	less than 20:1
(vii)	(vii)pH (1:5 solution) maximum	6.7
(viii)	(viii)Conductivity (as dSm^{-1}) not more than	8.2
(ix).	(ix). Heavy metal content (as mg/kg) Per cent. by weight maximum Arsenic (as As_2O_3) Cadmium (as Cd) Chromium (as Cr) Copper (as Cu) Mercury (as Hg) Nickel (as Ni) Lead (as Pb) Zinc (as Zn)	 10.00 5.00 50.00 300.00 0.15 50.00 100.00 1000.00.":

SCHEDULE V

PART A

SPECIFICATION OF NON-EDIBLE DE-OILED CAKE/CASTOR

(i)	Moisture per cent. by weight, maximum	12.0
(ii)	Colour	Brown or black
(iii)	Odour	Typical only odour specific to the oil of that seed and no foul odour
(iv)	Ash content per cent by weight, maximum	15.0
(v)	Total organic Carbon, per cent. by weight, minimum	25.0
(vi)	Total Nitrogen (as N) per cent. by weight, minimum	4.5
(vii)	Total Phosphates (as P_2O_5)per cent. by weight minimum	1.0
(viii)	Total Potash (as K_2O) per cent by weight, minimum	1.0
(ix)	C: N ratio	<10
(x)	pH	6.0-8.0
(xi)	Conductivity (as dsm^{-1}) not more than	4.0
(xii)	Particle size	Minimum 90% material should pass through 4.0mm IS sieve

PART B

TOLERANCE LIMIT OF NON-EDIBLE DE-OILED CAKE FERTILISERS 0.5 Unit for Nitrogen, Phosphorus and Potassium Nutrients combined