## SCHEDULE 1

Regulation 4(1)

## KINDS OF SEEDS TO WHICH THE REGULATIONS APPLY

Latin Name	Common Name
Avena sativa L	Oats
Hordeum vulgare L	Barley
Secale cereale L	Rye
<i>xTriticosecale</i> Wittm	Triticale
Triticum aestivum L. emend. Fiori et Paol	Wheat
Triticum durum Desf	Durum wheat
Triticum spelta L	Spelt wheat
Zea mays L. (partim) except for Zea mays convar. microsperma Koern. and Zea mays convar. saccharata Koern	Maize except for Popcorn and Sweet corn

SCHEDULE 2

Regulations 3(1) and (3), 5(3), (5) and (10) and 6(2)

#### OFFICIAL CERTIFICATES

1. On receipt of an application made in accordance with regulation 6(1) for the issue of an official certificate in respect of a seed lot of Breeder's Seed, Pre-basic Seed, Basic Seed, Certified Seed, Certified Seed of the First Generation or Certified Seed of the Second Generation the Minister shall, subject to paragraphs 2 and 3 below and to the payment of any fees payable under seeds regulations, issue in respect of such seed lot an official certificate containing the particulars specified in Schedule 3.

- 2. The Minister shall refuse to issue an official certificate in respect of a seed lot unless—
  - (a) an application has been made to the Minister, in such form and manner and at such time as he may require, for registration by him of—
    - (i) the seed lot or seed lots to be used for the production of the crop or crops from which the seed lot is to be obtained, and
    - (ii) the crop or crops from which the seed lot is to be obtained
  - (b) an official examination of the crop or crops from which the seed lot was obtained shall have shown that the crop or crops meet the standards appropriate to the category and the level set out in Part I of Schedule 4; and
  - (c) an official examination of a sample of the seed lot shall have shown that the seeds meet the standards appropriate to the category and the level set out in Part II of Schedule 4; except that—
    - (i) paragraphs 2(a) and (b) above, and sub-paragraph 2(c) above in so far as it relates to paragraph 1 of Part II of Schedule 4, shall not apply in relation to an application for the issue of an official certificate in respect of Breeder's Seed where the seed has been officially sampled for the purposes of official examination of a plot in accordance with paragraph 1 of Part I of Schedule 4,

- (ii) paragraph 2(c) above, in so far as it relates to standards of germination set out in Part II of Schedule 4, shall not apply in relation to an application for the issue of an official certificate in respect of seeds which are marketed in accordance with and subject to the requirements of regulation 5(5), and
- (iii) the Minister shall issue an official certificate in respect of a seed lot marketed in accordance with, and subject to any conditions imposed by, a general licence granted by the Minister under regulation 5(3).

**3.** The Minister may refuse to issue an official certificate in respect of a seed lot if it appears to him—

- (a) a sample of the seed lot taken for the purpose of an official examination in order to ascertain whether the seed lot meets the appropriate standards set out in Part II of Schedule 4 has not been taken in accordance with the requirements contained in Schedule 5;
- (b) an official examination of a plot sown with a sample of the seed lot sown in the field shows that the crop does not meet the appropriate standards set out in Part I of Schedule 4;
- (c) there has been any breach of seeds regulations in relation to the seed lot in respect of which application for an official certificate has been made.

#### SCHEDULE 3

Regulation 3(1)

#### PARTICULARS TO BE SPECIFIED IN AN OFFICIAL CERTIFICATE

- (i) Name and Address of Certifying Authority
- (ii) Applicant's name, address and registered number
- (iii) Seed lot reference number
- (iv) Kind/variety/category/level
- (v) Net weight of seed lot and number of containers
- (vi) Seed treatment (if applicable)

SCHEDULE 4

Regulations 3(1) and (3), 5(3), (5), (6), (7) and (11) and 9(2), (3) and (4)

## REQUIREMENTS FOR BASIC SEED, CERTIFIED SEED ANDCERTIFIED SEED OF THE FIRST AND SECOND GENERATIONS

# PART I

## CONDITIONS RELATING TO CROPS FROM WHICH SEEDS ARE OBTAINED

1. So far as the Minister can ascertain them, by the use of methods which shall include official examination of the crop and which may include examination of a plot sown with a sample from the seed lot sown in the field and the consideration of any other relevant information, the requirements for the crop set out below shall be met.

## Varietal identity and varietal purity

**2.** The characteristics for the determination of varietal identity and varietal purity shall be those recognised as those of the variety for the purposes of the National List or the Common Catalogue.

## **Crop inspections**

**3.** The crop shall be officially examined in such manner and at such times (when the cultural condition of the field and the stage of development and condition of the crop are such as to permit suitable checks of varietal identity, varietal purity, species purity and wild oats contamination to be made) as the Minister may reasonably require.

## **Previous cropping**

4. The crop may be grown only on land which has not previously been cropped in a manner that might adversely affect the nature or quality of the seeds to be produced and which complies with the Minister's requirements in that respect.

## **Isolation distances**

- (a) (a) There shall be a physical barrier or at least two metres of fallow or non-cereal crops between the crop and another cereal crop.
- (b) For rye the minimum distance from neighbouring crops of other varieties of rye or crops of the same variety of rye of a lower category shall be:—
  - (a) Crops to produce Pre-basic Seed and Basic Seed ... ... 300 metres
  - (b) Crops to produce Certified Seed ... ... 250 metres
- (c) For self-pollinating varieties of triticale the minimum distance from neighbouring crops or other varieties of triticale of a lower category shall be—
  - (i) Crops to produce Pre-Basic Seed and Basic seed ... ... 50 metres
  - (ii) Crops to produce Certified Seed ... ... 20 metres

With the approval of the Minister these distances may be modified if there is adequate protection against undesirable pollen.

## Standards for varietal purity, species purity and wild oats

6.

Crops to produce	Level	rye' and maize <sup>#</sup> )	Species purity g (excludin rye and maize) gepercentag by number	ıg	s <sup>*</sup> maximur	n number p	ber hectare	
				oats	barley	wheat durum and spelt wheat	rye and maize	triticale
Basic Seed Minimum	<sup>+</sup> Higher Voluntary Standard	99.95	99.99	Nil	7	7		
	standard	99.9	No standard	Nil	7	7	7	7
Certified Seed	—		—	—	—	—	50	—
Certified Seed of the First	<sup>+</sup> Higher Voluntary Standard	99.9	99.99	Nil	7	7	_	_
Generation	n Minimum Standard	99.7	No standard	Nil	20	50		50
Certified Seed of the	<sup>+</sup> Higher Voluntary Standard	99.7	99.99	Nil	7	7	_	_
Second Generation	n <sup>Minimum</sup> Standard	99.0	No standard	Nil	20	50		

\* Wild oats — Avena fatua, Avena sterilis, Avena luoviciana.

! For rye the number of plants of the same crop species which are recognisable as obviously not being true to the variety shall not exceed one per 30 sq m for the production of Basic Seed and one per 10 sq m for the production of Certified Seed.

+ Crops to produce seeds at the Higher Voluntary Standard must not be more than one-third laid at the time of inspection.

# For maize, the crop shall comply with the standards set out in paragraph 8(d) below.

## **Standards for Loose Smut Infection**

7. Barley, wheat, durum wheat, spelt wheat

	Minimum Standard	Higher Voluntary Standard
	(maximum percentage by	number)
Basic Seed	0.5	0.1
Certified Seed of the First Generation	0.5	0.2

	Minimum Standard	Higher Voluntary Standard
	(maximum percentage by nur	mber)
Certified Seed of the Second Generation	0.5	0.2

Seeds produced from a crop which has failed on official examination to meet the standards laid down by this paragraph may nevertheless be eligible for official certification—

- (a) if they have been adequately treated by any method approved by the Minister for the control of loose smut, or
- (b) if an embryo test carried out by an official seed testing station, on the sample submitted for official examination shows that the seeds meet those standards.

## Special conditions for maize

- (a) (a) For hybrid varieties the plant shall conform to the known characteristics of the parental lines.
- (b) Notwithstanding the provisions of paragraph 3 of this part of this Schedule, in respect of maize, the cultural condition of the field must also permit sufficient checks of the varietal identity and the varietal purity of the inbred lines and of the emasculation of plants for the production of seeds of hybrid varieties.
- (c) Unless there is adequate protection against undesirable pollen there should be a distance of at least 200 metres from neighbouring crops of other varieties or inbred lines or from crops of the same variety or inbred line of a lower category.
- (d) (i) The percentage by number of recognisable off-types shall not exceed, for the production of—

Basic Seed	0.1
Certified Seed of hybrid varieties	0.2
Certified Seed of open pollinated varieties	0.5

- (ii) With regard to the emasculation of plants for the production of Certified Seed of hybrid varieties, the observed percentage of plants of the female parent ascertained to have emitted pollen shall not exceed one at any one official examination and shall not exceed two in all the official examinations carried out on the crop;
- (iii) In the production of Certified Seed of hybrid varieties, all the parent plants shall flower sufficiently simultaneously.

# PART II

## CONDITIONS RELATING TO THE SEEDS

**1.** The seeds shall possess the varietal identity and the varietal purity (appropriate to the kind, category and level of the seeds) specified in Part I. This condition shall be applicable by analogy to inbred lines of maize.

2. The seeds shall be of a satisfactory state of health in so far as seed-borne diseases and organisms affecting the seeds are concerned.

3. The seeds shall comply with the following standards:—

#### (a) Oats, barley, wheat, durum wheat and spelt wheat

		Minimum Standard	Higher Voluntary Standard
<i>Germination</i> (% by number)	All categories	85	85
Analytical Purity (% by weight)	Basic Seed (except triticale)	99	99
	Basic Seed (triticale)	98	_
	All other categories	98	99

In the case of varieties of *Avena sativa* which are officially classified as "naked oat" types the minimum germination standard is 75%. In such instances the official label shall be endorsed "minimum germination capacity 75%".

#### Sample Purity Standards

	Seeds of O	ther Plant Sp	ecies			
Category	All other species	Other cultivated cereal species	All species other than cultivated cereals	Avena fatua Avena sterilis, Avena ludoviciana (wild oats) or Lolium temulentum (darnel)	Raphanus raphanistru (wild radish), or Agrostemm githago (corn cockle)	<b>a</b> ,
Basic Seed	4	1*	3	0!	1	1
Certified Seed of the First Generation and Certified Seed of the Second Generation	10	7	7	0()	3	3

#### Minimum Standard-maximum number of other seeds or structures in 500 g.

! Concerning the maximum content of seed of the species Avena fatua, Avena sterilis, Avena ludoviciana or Lolium temulentum. The presence of one seed of one of these species in 500 g shall not be considered an impurity if a search of a further 500 g from the same submitted sample is free.

\* Concerning the maximum content of seeds of other cereal species. Where the maximum content is fixed at one seed, a second seed shall not be regarded as an impurity, if a search of a further 500 g from the same submitted sample is free.

		ther Plant Sp				
Category	All other species	Other cultivated cereal species	All species other than cereal species	Avena fatua Avena sterilis, Avena ludoviciana or Lolium temulentum	Bromus	
Basic Seed	1	0	1	0	0'	0
Certified Seed of the First Generation	2	1	1	0	1	1
Certified Seed of the Second Generation	4	3	2	0	1	1
In Basic S only.	eed the nil stand	lard shall apply in	n respect of Ra	phanus raphanistru	m and Agrostem	ma githago
Rye						
Germination number)	n (% by	Basic a	nd Certified	l Seed 85		
Analytical F weight)	<i>Purity</i> (% by	Basic as	nd Certified	d Seed 98		
Sample Puri	ity Standard	5				
Maximum n in 500 g.	umber of se	eds				

# Higher Voluntary Standard-maximum number of other seeds or structures in 1 kg sample

	Seeds of O	ther Plant Sp	becies			
Category	All other species	Other cultivated cereal species	All species other than cultivated cereals	Avena fatua Avena sterilis, Avena ludoviciana or Lolium temulentun	-	untpieces)
Basic Seed	4	1*	3	0'	1	1
Certified Seed	10	7	7	0'	3	3

! Concerning the maximum content of seed of the species *Avena fatua, Avena sterilis, Avena ludoviciana* or *Lolium temulentum.* The presence of one seed of one of these species in 500 g shall not be considered an impurity if a search of a further 500 g from the same submitted sample is free.

\* Concerning the maximum content of seeds of other cereal species. Where the maximum content is fixed at one seed, a second seed shall not be regarded as an impurity, if a search of a further 500 g from the same submitted sample is free.

## (c) Maize

<i>Germination</i> (% by number)	All categories	90
Analytical Purity (% by weight)	All categories	98
Sample Purity Standards	Maximum content of seeds of other plant species (number of seeds in 250 g) (All categories)	Nil

# PART III

## SEED STANDARD FOR MOISTURE CONTENT

The moisture content of all categories and levels shall not exceed 17% by weight.

# PART IV

# SEED STANDARDS FOR LOOSE SMUT INFECTION

Barley, wheat, durum wheat, spelt wheat

	Minimum Standard	Higher Voluntary Standard
	(maximum percentage by	number)
Basic Seed	0.5	0.1
Certified Seed of the First Generation	0.5	0.2

	Minimum Standard	Higher Voluntary Standard
	(maximum percentage by num	lber)
Certified Seed of the Second Generation	0.5	0.2

SCHEDULE 5

Regulation 3(1), 7(1) and (2) and 10(5)

# PART I

## SAMPLING OF SEED LOTS

**1.** A sample shall be obtained from the seed lot by taking primary samples at random from different positions in the lot and combining them to form a composite sample. The composite sample may be submitted for testing intact but if the composite sample is too large it may be reduced in weight by using an approved seed sample divider, to give the submitted sample.

## Primary sample size

**2.** At each position of sampling of a seed lot, primary samples of approximately equal size shall be taken.

#### **Condition of the Seed Lot**

**3.** The seed lot to be sampled shall have been subject to appropriate mixing and blending techniques so that it is as uniform as practicable. There shall be no documentary or other evidence of heterogeneity. If a seed lot is presented for sampling in more than one container, the container shall be of the same size and type and contain approximately the same weight of seed.

### **Sampling from Sacks**

4. When the seed lot is in sacks or similar sized containers each containing more than 15 kg of seed and not more than 100 kg of seed, the minimum number of containers to be sampled shall be in accordance with the following table:—

NUMBER OF CONTAINERS IN THE LOT	MINIMUM NUMBER OF CONTAINERS TO BE SAMPLED
1-5	Sample each container and always take at least five primary samples
6-30	Sample five containers or at least one in every three containers, whichever is the greater
31-400	Sample 10 containers or at least one in every five containers, whichever is the greater
401 or more	Sample 80 containers or at least one in every seven containers, whichever is the greater

**5.** The containers to be sampled shall be selected at random and primary samples drawn from the top, middle and the bottom of containers, but not necessarily from more than one position in any container. The position from which the seed is taken shall be varied from container to container.

#### Sampling from small containers

6. For sampling seed lots in containers holding 15 kg of seed or less, a 100 kg weight of seed shall be taken as the basic unit and the small containers shall be combined to form sampling units not exceeding this weight (eg six packages of 15 kg, 20 packages of 5 kg). For sampling purposes each unit shall be regarded as one container and the sampling procedures prescribed in paragraphs 4 and 5 above shall be used.

7. When seed is in moisture-proof containers the opened or pierced containers shall be adequately closed or the residues from sampling transferred to new containers. When seeds are in very small packets (100 g or less) each packet may be considered as a primary sample and sufficient shall be taken at random to obtain a submitted sample of the minimum size prescribed in Part II of this Schedule.

#### Sampling from large containers or seed in bulk

**8.** For the sampling of containers holding more than 100 kg of seed, and for the sampling of seed in bulk, primary samples shall be taken from different horizontal and vertical positions selected at random and the following shall be regarded as the minimum requirement:—

LOT WEIGHT	NUMBER OF PRIMARY SAMPLES TO BE TAKEN
up to 500 kg	at least five primary samples
501-3000 kg	one primary sample for each 300 kg but not less than five
3001-20,000 kg	one primary sample for each 500 kg but not less than 10
20,001 kg and above	one primary sample for each 700 kg but not less than 40

### Sampling from a seed stream

**9.** Samples may be drawn from a seed stream during processing using an automatic sampling device, which shall uniformly sample the entire cross-section of the seed stream when a sample is taken. Portions of seed shall be taken at regular intervals throughout the processing of the lot using the same sampling intensity as for seed in bulk (see paragraph 8 above).

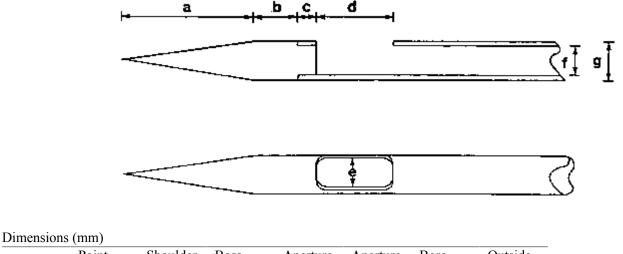
#### **Sampling Instruments**

10. Sampling instruments shall be capable of sampling all parts of the seed lot. Where it is not practicable to use one of the instruments or methods described in this Schedule other instruments or methods may be used at the discretion of the Minister.

11. The instrument used for drawing primary samples shall be one of those described below as appropriate to the location of the seeds, or any other suitable instrument for the time being approved by the Minister.

#### Dynamic Spear Sampler

(a) This instrument may be used, in accordance with the methods described in paragraph 12(a) below, for sampling seeds in sacks or small containers. It shall be a hollow, cylindrical, solid pointed metal spear or trier which shall be long enough to reach beyond the middle



of the sack from the side and shall have an aperture so positioned that portions of seed of equal volume are removed from each part of the sack through which it travels.

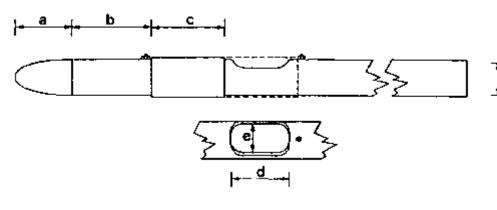
	Point	Shoulder	Boss	Aperture Length	Aperture Width	Bore	Outside Diameter
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
For sampling: All kinds other than							
maize	85	12	10	33	11	13	15
All kinds	82	12	13	40	15	17	19

Stick Samplers

(b) These instruments shall have an aperture or apertures which shall be of sufficient size to allow the unrestricted entry of seeds or other particles and which shall be capable of being opened and closed during the sampling procedure as appropriate to the method of use described in paragraph 12(b).

(i) Single chamber type

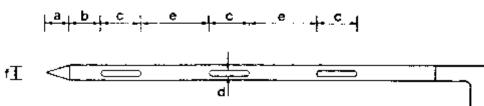
This instrument may be used for sampling seeds is open sacks, in large containers or in bulk.



Dimensions	(mm)					
Point	Shoulder	Sliding Sleeve	Aperture Length	Aperture Width	Bore	
	(a)	(b)	(c)	(d)	(e)	(f)
For sampling:						
Seeds in sacks	55	25	75	50	22	25
Seeds in large containers or in bulk	100	390	63	50	22	30

(ii) Multi-chamber type

This instrument may be used to sample seeds in sacks or, subject to the requirements of paragraph 10 above, any other containers. The apertures shall open into chambers that shall be separated from one another by transverse partitions. The contents of each chamber shall be regarded as a primary sample.



Dimensions				<u> </u>		5
	Point	Shoulder	Aperture Length	Aperture Width	Aperture Separation	Bore
(a)	(b)	(c)	(d)	(e)	(f)	
For sampling:						
All kinds	60	50	100	15	110	25

#### Cargo Sampler

(c) This instrument shall only be used, in accordance with the method described in paragraph 12(c) below, for sampling seed in large containers or bulk and shall only be used in the vertical position.

#### Seed Stream Samplers

(d) Seed stream samplers shall uniformly sample the cross section of the seed stream without any loss of the seeds that enter the sampler, in accordance with the method described in paragraph 12(d) below. Timing devices shall be attached so that the frequency and duration of sampling can be adjusted to meet the requirements of paragraph 9.

#### Methods of use

**12.** All instruments shall be clean before use. The methods of using these instruments shall be as follows:—

#### Dynamic Spear Sampler

(a) These samplers may be used in two ways as appropriate to their length.

**Method 1** (For instruments in which the aperture reaches only to the centre of the sack or small container).

The instrument shall be inserted into the sack in an upward direction at an angle of approximately 30° to the horizontal with its aperture downwards until the aperture reaches the centre of the sack or container. The instrument shall be lightly tapped to remove any seed taken in and then rotated to bring the aperture uppermost. It shall be withdrawn immediately with a vibratory or oscillatory motion and at a decreasing speed so that the quantity of seed obtained from successive locations increases progressively from the centre to the side of the sack. Seed passing through the instrument shall be collected in a clean container.

**Method 2** (For instruments in which the aperture reaches to the far side of a sack of small container).

A longer instrument shall be inserted in the manner described in method 1 above until its aperture reaches almost to the far side of the sack or container. It shall be tapped and rotated in the manner described above and then withdrawn at a uniform speed. Seed passing through the instrument shall be collected in a clean container.

#### Stick Sampler

## (b) (i) Single Chamber Type

- (a) The sleeve shall move freely.
- (b) The instrument shall be inserted vertically downwards till the aperture reaches the appropriate primary sampling position ensuring that the sleeve covers the aperture as it enters the seed.
- (c) The instrument shall be withdrawn sufficiently to uncover the aperture.
- (d) The instrument shall be left in position until the primary sample has been collected.
- (e) The instrument shall be withdrawn and the contents emptied into a clean container.

## (ii) Multi Chamber Type

- (a) The apertures shall be closed before insertion.
- (b) The instrument shall be inserted diagonally into sacks or vertically into large containers so that all apertures are fully covered.
- (c) The apertures shall be opened.
- (d) The instrument shall be agitated so that seed enters.
- (e) The apertures shall be closed gently to ensure that trapped seed is not broken or damaged.
- (f) The instrument shall be withdrawn and if the chambers are full the contents shall be emptied onto a clean surface or into a clean container.
- (g) If all the chambers are not full, the contents shall be discarded and procedures a-f shall be repeated.

## Cargo Sampler

- (c) (a) The lid shall open and close easily.
  - (b) The instrument shall be inserted with the lid closed to the appropriate primary sampling position which shall be at least 300 mm below the surface of the seed.
  - (c) The handle shall be raised sufficiently to open the lid.
  - (d) The instrument shall be left in position until the primary sample has been collected.
  - (e) The instrument shall be withdrawn and the contents shall be emptied into a clean container.

Seed Stream Samplers

(d) Such instruments shall be required to take the number of primary samples necessary for the weight of lot being sampled, the primary samples being taken from the lot at regular intervals and the resultant composite sample being of a weight not less than that prescribed in Part II below and not greater than can conveniently be reduced by means of one of the methods of sample reduction described in paragraph 14 below. They shall be installed in such a way that the composite sample shall be readily identifiable with the seed lot from which it was taken.

#### Obtaining submitted sample-composite sample division instruments

**13.** Provided the composite sample is of at least the minimum weight prescribed in Part II below for a submitted sample for a particular kind of seed, it may be used as the submitted sample. Where the composite sample exceeds the weight prescribed for the submitted sample, any of the following instruments may be used to obtain the submitted sample. Other instruments and methods may be used at the discretion of the Minister.

## **Riffle Divider**

(a) The riffle divider shall consist of a rectangular hopper leading to a series of evenly spaced chutes, arranged so that seed is distributed equally on two sides. There shall be a minimum of 18 chutes, each discharging in the opposite direction to its immediate neighbour.

Three (or more) metal collecting vessels (pans) of sufficient depth to prevent seed bouncing out shall be used.

#### **Centrifugal Divider**

(b) The centrifugal divider shall consist of a hopper from which seed flows on to a shallow cup which is then rotated by an electric motor. The seed shall be distributed by centrifugal force onto a stationery baffle which divides it into two equal parts which are then discharged through separate spouts.

Four metal collecting vessels (pans) of sufficient depth to prevent seed bouncing out shall be used.

#### Methods of Use

14. The method of using these instruments shall be as follows:—

#### **Riffle Divider**

- (a) (a) The divider shall be placed on a firm level surface.
  - (b) The divider and pans shall be clean.

## Sample Mixing

- (c) An empty pan shall be placed on each side of the divider to receive the discharge from the chutes.
- (d) The entire composite sample shall be poured evenly into the other pan(s).
- (e) The seed shall then be poured from the pan(s) evenly along the entire length of the hopper.
- (f) The two pans into which the seed has passed shall then be replaced with empty pans.
- (g) Procedures e and f shall then be repeated twice to mix the sample thoroughly.

#### Sample Reduction

- (h) Before reduction, the composite samples shall have been thoroughly mixed using procedures c-g.The contents of one of the two receiving pans shall then be set aside.If the seed in the second pan is of at least the minimum weight prescribed in Part II below for a submitted sample of a particular kind of seed, it may be used as the submitted sample.If the weight of seed in the second pan is greater than the appropriate minimum weight prescribed in Part II below for a submitted sample, it may be reduced using the following procedures i-k.
- (i) An empty pan shall be placed on each side of the divider to receive the discharge from the chutes.
- (j) The contents of the second pan shall be poured evenly along the entire length of the hopper.
- (k) The contents of one of the two pans into which the seed has passed shall then be set aside. If the weight of seed in the other pan is still greater than the appropriate minimum weight prescribed in Part II below for the submitted sample, it may be submitted intact or it may be reduced further using procedures i-k.
- (1) If the weight of seed in either of the two pans at either h or k is less than the appropriate minimum weight prescribed in Part II below for a submitted sample, the following procedures m-q shall be used.
- (m) An empty pan shall be placed on each side of the divider to receive the discharge from the chutes.
- (n) The contents of one of the pans shall be set aside. The contents of the other pan shall be poured evenly along the entire length of the hopper.
- (o) One receiving pan and its contents shall then be removed and replaced with an empty pan. The other pan, with its contents, shall be left in place.
- (p) The contents of the pan removed at o. shall be poured evenly along the entire length of the hopper so that two subsamples of different weight shall be produced.
- (q) Procedures o and p above when repeated, constitute the process of continuous halving, and shall be repeated using whichever subsample is appropriate until sufficient seed is obtained in one pan, which when added to the seed set aside in n produces a submitted sample of at least the appropriate minimum weight prescribed in Part II below.

#### Obtaining more than one submitted sample

- (r) Two submitted samples shall be obtained from a composite sample by first obtaining a sample of at least twice the appropriate minimum weight prescribed in Part II below for a submitted sample, using procedures c-g, and h-q as appropriate, and then dividing in into two parts by passing it once through the divider.
- (s) When three submitted samples are required from one composite sample, one sample of at least the appropriate minimum weight prescribed in Part II below for a submitted sample, shall be extracted using procedures c-g and h-q as appropriate. All portions of seed which have been

set aside shall then be recombined and the residue of the composite sample so obtained shall be subject to the procedure at r above.

## Centrifugal Divider

- (b) (a) The divider shall be levelled prior to use.
  - (b) The divider and pans shall be clean.

#### Sample Mixing

- (c) An empty pan shall be placed under each spout of the divider.
- (d) The entire composite sample shall be poured into the centre of the hopper.
- (e) The motor shall be operated so that the seed passes into the pans.
- (f) The motor shall be switched off.
- (g) The two pans containing seed shall be removed and replaced by empty ones.
- (h) The contents of both pans removed at g shall be poured together into the centre of the hopper, the seed being allowed to blend as it flows in. Procedures e, f and g shall be repeated.
- (i) Procedure h shall be repeated to mix the sample thoroughly.

#### Sample Reduction

- (j) Before reduction, the composite sample shall have been thoroughly mixed using procedures c-i.The contents of one of the two receiving pans shall be set aside.If the seed in the second pan is of at least the minimum weight prescribed in Part II below for a submitted sample of a particular kind of seed, it may be used as the submitted sample.If the weight of seed in the second pan is greater than the appropriate minimum weight prescribed in Part II below for a submitted sample, it may be reduced using the following procedures (k-m).
- (k) Empty pans shall be placed under the spouts.
- (1) The contents of the second pan shall be poured into the hopper and procedures e and f shall be repeated.
- (m) The contents of one of the two pans into which the seed has passed shall then be set aside. If the weight of seed in the other pan is still greater than the appropriate minimum weight prescribed in Part II below for a submitted sample, it may be submitted intact or it may be reduced further using procedures k-m.
- (n) If the weight of seed in either of the two pans at either j or m is less than the appropriate minimum weight prescribed in Part II below for a submitted sample, the following procedures (o-s) shall be used.
- (o) Empty pans shall be placed under the spouts.
- (p) The contents of one of the pans shall be set aside. The contents of the other pan shall be poured into the centre of the hopper and procedures e and f shall be repeated.
- (q) One receiving pan and its contents shall then be removed and replaced with an empty pan. The other pan, with its contents, shall be left in place.
- (r) The contents of the pan removed at q shall be poured into the centre of the hopper and procedures e and f shall be repeated so that two subsamples of different weight shall be produced.
- (s) Procedures q and r above, when repeated, constitute the process of continuous halving, and shall be repeated using whichever subsample is appropriate until sufficient seed is obtained in one pan, which when added to the seed set aside at p produces a submitted sample of at least the appropriate minimum weight prescribed in Part II below.

#### Obtaining more than one submitted sample

- (t) Two submitted samples shall be obtained from a composite sample by first obtaining a sample of at least twice the appropriate minimum weight prescribed in Part II below for a submitted sample, using procedures c-i and j-s as appropriate, and then dividing it into two parts by passing it once through the divider.
- (u) When three submitted samples are required from one composite sample, one sample, of at least the appropriate minimum weight prescribed in Part II below for a submitted sample, shall be extracted using procedures c-i and j-s as appropriate.All portions of seed which have been set aside shall then be recombined and the residue of the composite sample so obtained shall be subject to procedure t above.

#### **Moisture Samples**

**15.** Primary samples of seed for moisture tests shall be drawn in such a way as to minimise exposure to the atmosphere. The composite sample so collected shall be submitted intact to the seed testing station in an airtight container. It shall not be passed through a seed divider. Seed for moisture tests shall be kept separate from seed on which other determinations are to be made.

# PART II

## Maximum weight of a seed lot and minimum weight of a submitted sample

The maximum weight of a seed lot (or a weight which does not exceed that indicated by more than 5 per cent) and the minimum weight of a submitted sample shall be as indicated below:—

- (a) The maximum weight of a seed lot shall be 40 tonnes for maize and 25 tonnes for other kinds. The maximum weight of a seed lot of a mixture of seeds to which regulation 5(2)(a) and (b) applies shall be 25 tonnes.
- (b) The minimum weight of a submitted sample shall be 1 kg or, for inbred lines of maize, 250 g.
- (c) The minimum weight of a submitted sample for a moisture test shall be 100 g.

SCHEDULE 6

Regulations 5(3) and (14) and 9(2), (3), 4), (5), (7) and (12)

FOR THE PURPOSES OF THESE REGULATIONS THE PARTICULARS PRESCRIBED IN THIS SCHEDULE AS TO THE KIND AND VARIETY OF SEED SHALL BE INDICATED ON THE LABEL IN ROMAN CHARACTERS. THE KIND OF SEED SHALL BE DESIGNATED BY ITS LATIN NAME, AS PRESCRIBED IN SCHEDULE 1

# PART I

## A OFFICIAL LABEL FOR A PACKAGE OF BREEDER'S SEED

- (a) (a) Prescribed contents
  - (1) Certifying Authority.
  - (2) Reference number.
  - (3) Month and year when officially sealed.

- (4) Kind.
- (5) Variety.
- (6) "Breeder's Seed".
- (7) Declared net or gross weight or declared number of seeds.
- (8) Where weight is indicated and granulated pesticides, pelleting substances or other solid additives are used the nature of the additive and the approximate ratio between the weight of pure seed and the total weight.
- (b) Minimum size of label—110 mmx67 mm.
- (c) The label shall be coloured violet.

## **B OFFICIAL LABEL FOR A PACKAGE OF PRE-BASIC SEED**

- (a) (a) Prescribed contents
  - (1) Certifying Authority and Member State or their mark.
  - (2) Reference number of the lot.
  - (3) Kind.
  - (4) Month and year when officially sealed.
  - (5) Variety, or inbred line of maize.
  - (6) "Pre-basic Seed".
  - (7) Country of production.
  - (8) Declared net or gross weight or declared number of seeds.
  - (9) Where weight is indicated and granulated pesticides, pelleting substances or other solid additives are used the nature of the additive and the approximate ratio between the weight of pure seeds and the total weight.
  - (10) Number of generations preceding seed of the categories "Certified Seed" or "Certified Seed 1st Generation".
  - (11) For hybrid varieties of maize: "hybrid".
- (b) Minimum size of label—110 mmx67 mm.
- (c) The label shall be coloured white with a diagonal violet line.

## C OFFICIAL LABEL FOR A PACKAGE OF BASIC SEED, CERTIFIED SEED, CERTIFIED SEED OF THE FIRST GENERATION OR CERTIFIED SEED OF THE SECOND GENERATION

- (a) (a) Prescribed contents
  - (1) "EEC rules and standards".
  - (2) Certifying Authority and Member State or their mark.
  - (3) Reference number of the lot.
  - (4) Month and year when officially sealed.
  - (5) Kind.
  - (6) Variety, or inbred line of maize.
  - (7) Category.
  - (8) Country of production.

- (9) Declared net or gross weight or declared number of seeds.
- (10) Where weight is indicated and granulated pesticides, pelleting substances or other solid additives are used the nature of the additive and the approximate ratio between the weight of pure seeds and the total weight.
- (11) In the case of varieties which are hybrids or inbred lines-
  - (a) for Basic Seed where the hybrid or inbred line to which the seed belongs has been officially accepted on a National List or the Common Catalogue, the name of this component, under which it has been officially accepted, with or without reference to the final variety, accompanied, in the case of hybrids or inbred lines which are intended solely as components for final varieties, by the word "component";
  - (b) for Basic Seed in other cases, the name of the component to which the Basic Seed belongs, which may be given in code form, accompanied by a reference to the final variety, with or without reference to its function (male of female), and accompanied by the word "component";
  - (c) for Certified Seed, the name of the variety to which the seed belongs, accompanied by the word "hybrid".
- (b) Minimum size of the label—110 mmx67 mm.
- (c) The label shall be coloured white for Basic Seed, blue for Certified Seed and Certified Seed of the First Generation and red for Certified Seed of the Second Generation.

## D OFFICIAL LABEL FOR A PACKAGE OF A MIXTURE OF SEEDS

- (a) (a) Prescribed contents
  - (1) "Mixture of ....."
    - (kinds or varieties)
  - (2) Proprietary name if applicable.
  - (3) Service responsible for sealing and Member State or their mark.
  - (4) Reference number of the lot.
  - (5) Month and year when officially sealed.
  - (6) Declared net or gross weight or declared number of seeds.
  - (7) Where weight is indicated and granulated pesticides, pelleting substances or other solid additives are used the nature of the additive and the approximate ratio between the weight of pure seeds and the total weight.
  - (8) The words: "passed for marketing in United Kingdom only".
- (b) Minimum size of the label—110 mmx67 mm.
- (c) The label shall be coloured green.

## E FURTHER PARTICULARS TO BE GIVEN IN RESPECT OF MIXTURES OF SEEDS

- **E.** For each constituent:
  - (1) Kind.
  - (2) Category.
  - (3) Variety, or inbred line of maize.
  - (4) Country of production.

- (5) Proportion by weight of the mixture.
- (6) For hybrid varieties of maize: "hybrid".

Mixtures of varieties:

Disease or pest the incidence of which is claimed to be reduced.

## F OFFICIAL LABEL FOR A PACKAGE OF SEED NOT FINALLY CERTIFIED

- (a) (a) Prescribed contents of the label
  - (1) Certifying authority.
  - (2) Kind.
  - (3) Variety.(In the case of varieties (inbred lines, hybrids), which are intended solely as components for hybrid varieties, the word "component" shall be added.)
  - (4) Category. (In the case of hybrid varieties the word "hybrid" shall be added.)
  - (5) Crop Identity Number.
  - (6) Declared net or gross weight (Tonnes).
  - (7) The words "seed not finally certified".

The label shall be coloured grey.

- (b) Information required for the document
  - (1) Certifying authority.
  - (2) Kind.
  - (3) Variety.
  - (4) Category.
  - (5) Seed Lot Reference Number (UK) or Reference Number (other than UK) of the seed used to sow the field and name of the country or countries which certified that seed.
  - (6) Crop Identity Number.
  - (7) Area cultivated for the production of the lot covered by the document (Hectares).
  - (8) Quantity of seed harvested and number of packages.
  - (9) Number of generations after basic seed, in the case of certified seed.
  - (10) Attestation that the conditions to be satisfied by the crop from which the seed comes have been fulfilled.
  - (11) Where appropriate, results of a preliminary seed analysis.

# PART II

## A SUPPLIER'S LABEL FOR A PACKAGE OF UNCERTIFIED PRE-BASIC SEED

- (a) (a) Prescribed contents
  - (1) Name and address of the supplier responsible for affixing the labels or his identification mark.
  - (2) Reference number of the lot.
  - (3) "Maize".
  - (4) Variety, of inbred line of maize.

- (5) "Uncertified Pre-basic Seed".
- (6) Declared net or gross weight or declared number of seeds.
- (7) For hybrid varieties of maize: "hybrid".
- (b) The label shall be coloured buff.

# PART III

## SMALL PACKAGES

# A SUPPLIER'S LABEL FOR A SMALL PACKAGE OF SEEDS OTHER THAN A MIXTURE OF SEEDS

- (a) (a) Prescribed contents
  - (1) "EEC rules and standards".
  - (2) Name and address of the supplier responsible for affixing the label or his identification mark.
  - (3) Reference number of the lot.
  - (4) Kind.
  - (5) Variety, or inbred line of maize.
  - (6) Category.
  - (7) Declared net weight or declared number of seeds.
  - (8) For hybrid varieties of maize: "hybrid".
  - (9) "Passed for marketing in United Kingdom only".
- (b) The label shall be coloured white with a diagonal violet line for Pre-basic Seed, white for Basic Seed, blue for Certified Seed and Certified Seed of the First Generation and red for Certified Seed of the Second Generation.

## **B SUPPLIER'S LABEL FOR A SMALL PACKAGE OF A MIXTURE OF SEEDS**

- (a) (a) Prescribed contents
  - (1) "Mixture of .....".
    - (kinds of varieties)
  - (2) Name and address of person responsible for sealing package or his identification mark.
  - (3) Reference number of the lot.
  - (4) Proprietary name of the mixture or kinds or varieties of the constituents.
  - (5) Declared net weight or declared number of seeds.
  - (6) "Passed for marketing in United Kingdom only".
- (b) The label shall be coloured green.

# PART IV

#### A PARTICULARS TO BE MARKED OR DISPLAYED ON THE SALE OF UNPACKETED SEEDS OTHER THAN MIXTURES OF SEEDS

- (1) "Complies with legal standards".
- (2) Kind.
- (3) Variety, or inbred line of maize.
- (4) For hybrid varieties of maize: "hybrid".

# B PARTICULARS TO BE MARKED OR DISPLAYED ON THE SALE OF UNPACKETED MIXTURES OF SEEDS

- (1) "Complies with legal standards".
- (2) Proprietary name of the mixture or kinds and proportion by weight of the constituents.

# PART V

## PRINTING OF SPECIFIED MATTERS ON PACKAGES (whole-bag labelling)

#### Seeds which have not been imported

A.—(1) The printing or stamping of the packages shall be under the supervision of the Minister.

(2) The manner of printing or stamping shall have been approved by the Minister.

(3) Each package shall have printed or stamped on it, or be perforated with, an individual serial number allocated by the Minister, which shall appear in the same panel as the particulars of the matters specified in Part I of this Schedule.

(4) Arrangements shall be made with the printer for returns to be made to the Minister of the number of packages printed or stamped pursuant to regulation 9(5) and of the individual serial numbers of such packages.

(5) The reference number of the seed lot and the month and year in which the package was officially sealed shall be printed or stamped under the supervision of the Minister at the time of sampling for official examination.

(6) There shall be kept such records of seed packaged and marketed pursuant to regulation 9(5) as may be required by the Minister.

(7) Each package of seed marketed in accordance with regulation 5(5) shall be capable of having affixed to it, in a manner approved by the Minister, a supplier's label containing a statement pursuant to regulation 9(3).

#### **B** Seeds imported from another Member State

**B.** Such requirements of the Member State from which the seeds have been imported as correspond to the requirements specified in this Part for seeds which have not been imported shall, in the opinion of the Minister, have been satisfied.

## SCHEDULE 7

Regulation 10(2)

# LIMITS OF VARIATION

## GERMINATION

Minimum percentage of Germination	Limit of variation
per cent	per cent
99-100	2
97-98	3
94-96	4
91-93	5
87-90	6
82-86	7
76-81	8
69-75	9
65-68	10

## ANALYTICAL PURITY

<i>Minimum percentage of Analytical Purity</i> per cent	Limit of variation per cent
99.9-100	0.2
99.8	0.3
99.6-99.7	0.4
99.3-99.5	0.5
99.0-99.2	0.6
98.5-98.9	0.7
98.3-98.4	0.8
97.5-98.2	0.9
97.0-97.4	1.0
96.5-96.9	1.1
95.5-96.4	1.2
95.0-95.4	1.3

## CONTENTS OF SEEDS OF OTHER SPECIES

>Maximum number of seeds number	Limit of variation number
0	1
1	3

>Maximum number of seeds number	Limit of variation number
2	4
3 and 4	5
5 and 6	6
7 and 8	7
9 to 11	8
12 to 14	9
15 to 17	10
18 to 20	11