

Government of Karnataka
Department of Agricultural Marketing

Office of the Director
of Agricultural Marketing
No.16, 2nd, Raj Bhavan Road,
Bangalore 560001

Subject: Quality parameters, grading, quality certification and other related matters for Sunflower seeds sold in online markets – reg.

Preamble

It is necessary to specify quality parameters, grading, quality certification and other related matters for Sunflower seeds sold in markets as specified under Rule 91-O (1) of the Karnataka Agricultural Produce Marketing (Regulation and Development) Rules, 1968 (“Rules”) and hence the following order is issued under Rule 91-O (2) of the Rules.

Order no.KruMaE/Niyavi/Avyava/315/13-14, dated: 02/07/2014

1. Title

This order shall be called as Quality parameters, Grading, Quality Certification and other related matters for Sunflower seeds sold in the Unified Market Platform Order.

2. Assaying parameters

The parameters which shall be assayed in respect of Sunflower seeds brought to the markets specified under rule 91-O (1) of the Rules shall be as specified in Schedule 1 to this order.

3. Sampling procedure

- (1) The lot brought by the seller may be in packed form (in gunny bags) or may be in the form of a heap. Each lot shall be kept separate either as a stack or as a heap for sampling.
- (2) If the lot is brought in packed form, then a bulk sample is prepared by collecting a small quantity of the commodity from the top, middle and bottom of every bag in the lot and thoroughly mixing the quantity so collected.
- (3) If the lot is brought in heap form, then samples are taken from at least seven different parts of the heap, namely, front, back, sides, centre top, centre middle and centre bottom. The quantity so collected is mixed thoroughly to derive the bulk sample.
- (4) A composite sample is prepared by drawing about 1/2 Kg from the bulk sample.
- (5) The composite sample is then divided in to five equal parts of about 100 grams by using a sample divider.
- (6) In case a sample divider is not available, the composite sample is emptied on a flat smooth surface in the form of a circle of thickness of about 12 mm to 25 mm. About 100 grams of sample is then scooped from different points namely, centre, sides, etc., taking care that no foreign matter is left over when scooping.

- (7) Each part is then placed in a separate plastic transparent bag and a sample identity slip as per Schedule 2 to this order shall be attached in each of the bag and the bag sealed. These samples will be distributed as under.
- One sample to Farmer/Seller for his reference;
 - One sample to APMC for display for traders for inspection;
 - One sample to APMC for dispute resolution;
 - One sample to the assaying agency for analysis; and
 - One sample for record with the assaying agency.
- (8) Necessary particulars shall be entered in a register to have a record of the samples drawn. This register shall be in a format S1 for Sunflower seeds and as indicated in Schedule 3 to this order.

4. Assaying procedure

- (1) The sample is first examined to detect the presence of any live infestation. If live infestation is detected in the lot, then the lot would be rejected. Thereafter, the sample is checked for fungus and/or any other infestations.
- (2) The sample would then be subjected to physical analysis as detailed in Schedule 4 to this order.
- (3) The assaying agency shall issue a certificate specifying the quality parameters and the period for which the assaying certificate is valid. Thereafter, details of the quality of the lot shall be entered in the Unified Market Platform.

5. Other matters

The seller shall be responsible to comply with the provisions prescribed under the Food and Safety Standards Act, 2006 and other applicable provisions of law.

6. Disputes on assaying

Any dispute in this regard shall be settled by the Disputes Committee for Online Markets set up by the respective market committee under Rule 91-P (1) of the Karnataka Agricultural Produce Marketing (Regulation and Development) Rules, 1968 and the guidelines issued by the Director of Agricultural Marketing under Rule 91-P (7) of the said Rules.

7. Disposal of samples

After the commodity is sold through the e tender process and delivered to the buyer, the requirement to preserve the samples taken would cease. Three lots of samples, namely, the sample maintained by the APMC for display for traders to inspect, the sample maintained by the APMC for dispute resolution and the one retained by the assaying agency for reference may be aggregated and disposed of by Rashtriya e Market Services Private Limited any time after fifteen days of the delivery of the commodity to the buyer. The proceeds realised due to such disposal shall be credited to the account of the said company.

8. Removal of difficulties

Any difficulty in the implementation of this order shall be referred to the Director of Agricultural Marketing, who shall issue clarifications as deemed necessary.

(P.S. Vastrad)
Director

To

1. The Managing Director, Rashtriya e-Market Services Private Limited, Bangalore.
2. Chairmen/Secretary, Agricultural Produce Marketing Committee, Raichur, Gadag, Yadgir, Challkere and Chitradurga.
3. The Additional Director (Enforcement), Department of Agricultural Marketing, Bangalore.

4. The Joint Director (Enforcement), Department of Agricultural Marketing, North Zone, Hubli and South Zone, Bangalore.
5. Deputy Director/Assistant Director, Department of Agricultural Marketing, Raichur, Gadag, Yadgir and Chitradurga.
6. Office copy.

Schedule 1

Assaying Parameters for Sunflower Seeds

Sunflower Seeds shall be assayed for the following parameters –

- **Foreign matter and impurities, expressed in per cent:** Foreign matter and impurities shall mean dust, dirt, stones, lumps of earth, chaff, stem, straw or any other impurity.
- **Damaged Seeds, expressed in per cent:** Damaged seeds shall mean seeds which are internally damaged or discoloured or broken.
- **Immature, shrivelled & dead seeds, expressed in per cent:** Immature, shrivelled & dead seeds shall mean seeds which are not properly developed and/or shrunken.
- **Weevilled seeds, expressed in per cent:** Weevilled seeds shall mean seeds that are wholly or partly bored/ eaten by the weevil, materially affecting the quality.
- **Moisture content,** expressed in per cent.

Format of Sample identity slip to be placed with the petro bulk seal

Sample identity slip	
Name of commodity	Sunflower Seeds
Market arrived Market/..... Sub market
Date of drawing of the sample	
Name of the farmer/seller	
Lot number	
Name of the Supervisor	
Signature of supervisor with date	
Signature of the Farmer/Seller	

Format of register to be maintained

Form S1

Name of the commodity – Sunflower Seeds

APMC: Raichur, Gadag, Yadgir, Challkere and Chitradurga

Sl. No.	Date	Quantity/No of bags	Lot number	Name of the farmer /trader	Contact number	Signature of the supervisor

Signature of APMC official

Name:

Date :

Schedule -4

Physical analysis of Sunflower Seeds

1. Analysis for Foreign matter:
 - a) Weigh the total sample and note down the weight (W_0).
 - b) Pour the sample on a white enamel plate.
 - c) Separate all foreign matter like dust, dirt, stones, lumps of earth, chaff, stem, straw or any other impurities etc. by hand picking.
 - d) Collect all dust, dirt, stones, lumps of earth, chaff, stem, straw or any other impurity in a Petri dish and weigh it (W_1).
 - e) The percent of Foreign matter is $(W_1/ W_0)*100$

2. Analysis for Damaged Seeds
 - a) Take the above sample
 - b) Separate seeds which are internally damaged, discoloured or broken by hand picking.
 - c) Weigh the damaged seeds (W_2).
 - d) The percent of damaged seeds present is $(W_2/ W_0)*100$

3. Analysis for Immature, shrivelled & dead seeds
 - a) Take the above sample.
 - b) Separate seeds that are not properly developed and/or shrunken by hand picking.
 - c) Weigh the Immature, shrivelled & dead seeds (W_3).
 - d) The percent of Immature, Shrivelled & dead seeds present is $(W_3/ W_0)*100$

4. Analysis for Weevilled seeds
 - a) Take the above sample
 - b) Separate seeds that are wholly or partly bored/ eaten by weevil by hand picking.
 - c) Weigh the Weevilled seeds (W_4).
 - d) The percent of Weevilled seeds present is $(W_4/ W_0)*100$

5. Moisture:
 - a) Weigh an appropriate amount of sample in a pre-weighed metal dish (W_0).
 - b) Dry the sample in a hot air oven at $100^{\circ} C - 110^{\circ} C$ for about two hours.
 - c) Cool the dish in desiccators and weigh the dish (W_5).
 - d) The percent difference between the weights of the sample is calculated as per IS 4333: 2002 as $W = \{(W_0 - W_5)/W_0\}$, which is the moisture content of the lot.

