

CHAPTER 2 FOOD PRODUCT STANDARDS

2.9: SALT, SPICES, CONDIMENTS AND RELATED PRODUCTS

Note: (1) The extraneous matter wherever prescribed, shall be classified as follows:

- a. Organic extraneous matter such as chaff, stems, straw
 - b. Inorganic extraneous matter such as dust, dirt, stones and lumps of earth. This shall not exceed 2 percent by weight of the total Extraneous matter
- (a) All the Spices, condiments and related products from 2.9.1 to 2.9.29 shall conform to the microbiological requirements given in table 3 of Appendix B.

2.9.1: Caraway (Siahjira):

1. **(Siahjira) whole** means the mericarps of nearly mature fruit of *Carum carvi* L. The fruits are split into two mericarps by thrashing after drying. It shall have characteristic flavour and shall be free from extraneous flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. It shall be free from attack by *Screlotinia* mushrooms. It shall be free from added colouring matter and other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Moisture	Not more than 13.0 percent by weight
(iii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis.	Not more than 1.5 percent by weight
(v)	Volatile oil content on dry basis	Not less than 2.5 percent by (v/w).
(vi)	Insect damaged matter	Not more than 1.0 percent by

	weight
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Blond Caraway (*Carum carvi*) whole is slightly larger and its colour is paler.

2. Caraway Black (Siahjira) Whole means the dried seeds of *Carum bulbocastanum*. It shall conform to the following standards.

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Moisture	Not more than 12.0 percent by weight
(iii)	Total ash on dry basis	Not more than 9.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 1.5 percent by (v/w)
(vi)	Insect damaged matter	Not more than 1.0 percent by weight

1. Caraway (Siahjira) powder means the powder obtained by grinding the dried mature fruit of *Carum Carvi* L. without addition of any other matter. It may be in the form of small pieces of seeds or in finely ground form. It shall have characteristic flavour and shall be free from extraneous flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter and other harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 12.0 percent by weight
(ii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight

(iv)	Volatile oil content on dry basis Black	Not less than 2.25 percent by v/w
	Blond	Not less than 1.33 percent by v/w

2.9.2: Cardamom (Elaichi)

1. **Cardamom (Chhoti Elaichi) Whole** means the dried capsules of nearly ripe fruits of *Elettaria cardamomum* L. Maton Var. *Minuscula* Burkill. The capsules may be light green to brown or pale cream to white when bleached with sulphur dioxide. It shall have characteristic flavour free from any foreign odour, mustiness or rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. Thrip marks alone should not lead to the conclusion that the capsules have been infested with insects. The product shall be free from added colouring matter and other harmful substances.

It shall conform to the following standards:

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Empty and malformed capsules by count	Not more than 3.0 percent by count
(iii)	Immature and shrivelled capsules	Not more than 3.0 percent by weight
(iv)	Moisture	Not more than 13.0 percent by weight
(v)	Total ash on dry basis	Not more than 9.5 percent by weight
(vi)	Volatile oil content on dry basis	Not less than 3.5 percent by v/w
(vii)	Insect damaged matter	Not more than 1.0 percent by weight

2. **Cardamom (Chhoti Elaichi) seeds** means the decorticated seeds separated from the dried capsules of nearly ripe fruits of *Elettaria Cardamomum* L. Maton var *minuscula* Burkill. The seeds shall have characteristic flavour free from foreign odour, mustiness or rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be

free from added colouring matter and any other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Light seeds	Not more than 3.0 percent by weight
(iii)	Moisture	Not more than 13.0 percent by weight
(iv)	Total ash on dry basis	Not more than 9.5 percent by weight
(v)	Volatile oil content on dry basis	Not less than 3.5 percent by v/w
(vi)	Insect damaged matter	Not more than 1.0 percent by weight

Explanation:- Light seeds mean seeds that are brown or red in colour and broken immature and shrivelled seeds.

3. **Cardamom (Chhoti Elaichi) powder** means the powder obtained by grinding dried seeds of *Elettaria Cardamomum* L. Maton var *miniscula* Burkill without addition of any other substance. It may be in the form of small pieces of seeds or in finely ground form. It shall have characteristic flavour free from foreign odour, mustiness or rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter and other harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 11.0 percent by weight
(ii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 3.0 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 3.0 percent by v/w.

4. **Large Cardamom (Badi Elaichi) whole** means the dried nearly ripe fruit (capsule) of *Amomum subulatum* Roxb. The capsule shall have characteristic flavour free from foreign odour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and any harmful substance.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Empty and malformed capsules by count	Not more than 2.0 percent by count
(iii)	Immature and shrivelled capsules	Not more than 2.0 percent by weight
(iv)	Moisture	Not more than 12.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(vi)	Total ash on dry basis	Not more than 8.0 percent by weight
(vii)	Volatile oil content of seeds on dry basis	Not less than 1.0 percent by v/w.
(viii)	Insect damaged matter	Not more than 1.0 percent by weight.

5. **Large Cardamom (Badi Elaichi) seeds** means the seeds obtained by decortication of capsules of *Amomum subulatum* Roxb. It shall have characteristic flavour free from foreign odour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by
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		weight
(ii)	Light seeds / Brown / Red seeds	Not more than 3.0 percent by weight
(iii)	Moisture	Not more than 12.0 percent by weight
(iv)	Total ash on dry basis	Not more than 8.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(vi)	Volatile oil content on dry basis	Not less than 1.0 percent by v/w
(vii)	Insect damaged matter	Not more than 1.0 percent by weight.

6. Large Cardamom (Badi Elaichi) powder means the powder obtained by grinding seeds of *Amomum subulatum* Roxb, without the addition of any other substance. It may be in the form of small pieces of seeds or in finely ground form. The powder shall have characteristic flavour free from off flavour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter and any harmful substance.

It shall conform to the following standards:—

(i)	Moisture	Not more than 11.0 percent by weight
(ii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 1.0 percent by weight

2.9.3: Chillies and Capsicum (Lal Mirchi)

1. Chillies and Capsicum (Lal Mirchi) whole - means the dried ripe fruits or pods of the *Capsicum annum* L & *Capsicum frutescens* L. The pods shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from extraneous colouring matter, coating of mineral oil and other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Unripe and marked fruits	Not more than 2.0 percent by weight
(iii)	Broken fruits, seed & fragments	Not more than 5.0 percent by weight
(iv)	Moisture	Not more than 11.0 percent by weight
(v)	Total ash on dry basis	Not more than 8.0 percent by weight
(vi)	Ash insoluble in dilute HCl on dry basis	Not more than 1.3 percent by weight
(vii)	Insect damaged matter	Not more than 1.0 percent by weight

2. Chillies and Capsicum (Lal Mirchi) powder means the powder obtained by grinding clean ripe fruits or pods of *Capsicum annum* L and *Capsicum frutescens* L. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be dry, free from dirt, extraneous colouring matter, flavouring matter, mineral oil and other harmful substances. The chilli powder may contain any edible vegetable oil to a maximum limit of 2.0 percent by weight under a label declaration for the amount and nature of oil used.

It shall conform to the following standards:—

(i)	Moisture	Not more than 11.0 percent by weight
(ii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis	Not more than 1.3 percent by weight
(iv)	Crude fibre	Not more than 30.0 percent by weight
(v)	Non-volatile ether extract on dry basis	Not less than 12.0 percent by weight

2.9.4: Cinnamon (Dalchini)

1. Cinnamon (Dalchini) whole means the inner bark of trunks or branches of *Cinnamomum Zeylanicum* Blume. It shall have characteristic odour and flavour and shall be free from foreign flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter, foreign vegetable matter and other harmful substances.

It shall conform to the following standards:

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Moisture	Not more than 12.0 percent by weight
(iii)	Total ash on dry basis	Not more than 7.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 0.7 percent by v/w
(vi)	Insect damaged matter	Not more than 1.0 percent by weight
³² [(vii)	Coumarin content (on dry basis)	Not more than 0.3 percent by weight]

2. Cinnamon (Dalchini) powder means the powder obtained by grinding inner bark of trunk or branches of *Cinnamomum Zeylanicum* Blume. The powder shall be yellowish to reddish brown in colour with characteristic odour and flavour and shall be free from off flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter, foreign vegetable matter and other harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 12.0 percent by
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		weight
(ii)	Total ash on dry basis	Not more than 7.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 0.5 percent by weight
³² [(v)	Coumarin content (on dry basis)	Not more than 0.3 percent by weight]

2.9.5: Cassia (Taj)

1. **Cassia (Taj) Whole** means the bark of trees of *Cinnamomum Cassia* (Nees) ex Blume, *Cinnamomum aromaticum* (Nees) Syn, *Cinnamomum burmanii* (C.G. Nees) blume and *Cinnamomum loureini* Nees. The product shall have characteristic odour and flavour and shall be free from off flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter, foreign vegetable matter and other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Moisture	Not more than 12.0 percent by weight
(iii)	Total ash on dry basis	Not more than 5.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis	Not more than 1.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 2.0 percent by v/w.

2. **Cassia (Taj) powder** means the powder obtained by grinding bark of

trees of *Cinnamomum Cassia* (Nees) ex Blume, *Cinnamomum aromaticum* (Nees) Syn, *Cinnamomum burmanii* (CG Nees) Blume and *Cinnamomum loureini* Nees without addition of any other matter. The powder shall have characteristic odour and flavour and shall be free from off flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter, foreign vegetable matter and other harmful substances.

It shall conform to the following standards:

(i)	Moisture	Not more than 12.0 percent by weight
(ii)	Total ash on dry basis	Not more than 5.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis	Not more than 1.0 percent by v/w
(iv)	Volatile oil content on dry basis	Not less than 1.5 percent by weight

2.9.6: Cloves (Laung)

1. **Cloves (Laung)** Whole means the dried unopened flower buds of *Eugenia Caryophyllus* (C. Sprengel) Bullock and Harrison. It shall be of a reddish brown to blackish brown colour with a strong aromatic odour free from off flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. It shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Tendrils, Mother Cloves	Not more than 2.0 percent by weight
(iii)	Khokar Cloves	Not more than 2.0 percent by weight
(iv)	Moisture	Not more than 12.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 17.0 percent by v/w
(vi)	Headless cloves	Not more than 2.0 percent by weight
(vii)	Insect damaged cloves	Not more than 2.0 percent by weight

Explanation: (1) **Headless Cloves:** A Clove consisting of only the receptacle and sepals and which has lost the domed shaped head.

(2) **Khokar Cloves:** A Clove which has undergone fermentation as a result of incomplete drying as evidenced by its pale brown colour whitish mealy appearance and other wrinkled surface.

(3) **Mother Cloves:** A fruit in the form of a ovoid brown berry surmounted by four incurved sepals.

2. **Cloves (Laung) powder** means the powder obtained by grinding the dried unopened flower buds of *Eugenia Caryophyllus* (C. Sprengel) Bullock and Harrison without any addition. It shall be of a brown colour with a violet tinge and shall have a strong spicy aromatic odour free from off flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. It shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Moisture	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 7.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 0.5 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 16.0 percent by v/w
(v)	Crude Fibre	Not more than 13.0 percent by weight

2.9.7: Coriander (Dhania)

1. **Coriander (Dhania) whole** means the dried mature fruits (seeds) of *Coriandrum sativum* L. It shall have characteristic aroma and flavour. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Split fruits	Not more than 10.0 percent by weight
(iii)	Damaged / Discoloured fruits	Not more than 2.0 percent by weight
(iv)	Moisture	Not more than 9.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 0.1 percent by v/w
(vi)	Total ash on dry basis	Not more than 7.0 percent by weight

(vii) Ash insoluble in dilute HCl on dry basis.	Not more than 1.5 percent by weight
(viii) Insect damaged matter	Not more than 1.0 percent by weight

2. **Coriander (Dhania) powder** means the powder obtained by grinding clean, sound, dried mature fruits of *Coriandrum sativum* L. It shall be in the form of rough or fine powder. It shall have typical aroma and shall be free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination; the powder shall be free from added colour, starch, bleach or preservative.

It shall conform to the following standards:—

(i)	Moisture	Not more than 9.0 percent by weight
(ii)	Volatile oil content on dry basis	Not less than 0.09 percent by v/w
(iii)	Total ash on dry basis	Not more than 7.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis.	Not more than 1.5 percent by weight

2.9.8: Cumin (Zeera, Kalonji)

⁷³[1. **Cumin (Safed Zeera) whole.**- means the dried mature seeds of *Cuminumcyminum* L. of the Apiaceae family. It shall have characteristic colour, aroma and flavour. It shall be free from live insects, any foreign odour or flavour and mustiness. It shall be free from added colour and harmful substances.

(2) It shall conform to the following requirements, namely:-

TABLE

S. No.	Requirements	Limits
1	Moisture content, percent by mass (maximum)	10.0
2	Total ash, percent by mass on dry basis (maximum)	12.0
3	Acid insoluble ash, percent by mass on dry basis (maximum)	4.0
4	Volatile oil content, ml/100g, on dry basis (minimum)	1.5
5	Extraneous vegetable matter content, percent by mass (maximum)	3
6	Foreign matter content, percent by mass (maximum)	0.5
7	Mouldy seeds, percent by mass (maximum)	1.0
8	Proportion of damaged/defective fruits, percent by mass (maximum)	5.0
9	Broken, percent by mass (maximum)	3.0
10	Dead insects, insect fragments, rodent contamination , percent by mass (maximum)	0.5
11	Insect-damaged matter, percent by mass (maximum)	1.0
12	Animal excreta (mg/kg) , (maximum)	1.0
13	Uric Acid , mg/kg on dry basis (maximum)	100

Explanations.- for the purpose of this sub-regulation, -

(a) **Extraneous vegetable matter.-** Vegetative matter associated with the plant from which the product originates - but is not accepted as part of the final product

(b) **Foreign matter.-** Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal etc.

(c) **Damaged or defective fruits.-** Damaged, discoloured, shrivelled and immature seeds.

(d) **Insect-damaged matter.-** Cumin seeds that are damaged, discoloured or showing signs of bores as a result of infestation of insects so as to affect the quality of the materials.

(e) **Cracked.-** Broken into two or more pieces.

2. Cumin (Safed Zeera) powder.- (1) Cumin (Safed Zeera) powder means the powder obtained by grinding the dried mature seeds of *Cuminumcuminum* L of the Apiaceae family. It shall have characteristic aroma and flavour. It shall be free from any foreign odour or flavour and mustiness. It shall be free from mould, living and dead insects, insect fragments and rodent contamination. The product shall be free from added colour and harmful substances.

(2) It shall conform to the following requirements, namely:-

TABLE

S. No.	Requirements	Limits
1	Moisture content, percent by mass (maximum)	10.0
2	Total ash, percent by mass on dry basis (maximum)	9.5
3	Acid insoluble ash, percent by mass on dry basis (maximum)	1.5
4	Volatile oil content, ml/100g, on dry basis (minimum)	1.3
5	Uric Acid, mg/kg on dry basis (maximum)	100]

3. **Cumin Black (Kalonji) whole** means the seeds of *Nigella sativa* L. It shall have characteristic aromatic flavour free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colour and harmful substances.

It shall conform to the following standards: —

(i)	Extraneous matter	Not more than 1.5 percent by weight
(ii)	Broken fruits (Damaged, shrivelled, discoloured and immature seed)	Not more than 5.0 percent by weight
(iii)	Moisture	Not more than 10.0 percent by weight
(iv)	Total ash on dry basis	Not more than 8.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight
(vi)	Non volatile ether extract on dry basis	Not less than 12.0 percent by weight
(vii)	Volatile oil content on dry basis	Not less than 1.0 percent by v/w
(viii)	Edible seeds other than cumin	Not more than 2.0 percent by

	black	weight
(ix)	Insect damaged matter	Not more than 1.0 percent by weight

4. **Cumin Black (Kalonji) powder** means the powder obtained by grinding the dried seeds of *Nigella sativa* L. It shall have characteristic aromatic flavour free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colour and harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 7.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 0.9 percent by v/w
(v)	Non volatile ether extract on dry basis (ml/100gm)	Not less than 12.0 percent by weight

2.9.9: Fennel (Saunf)

1. **Fennel (Saunf) whole** means the dried ripe fruit of *Foeniculum vulgare* P. Miller Var. *Vulgare*. It shall have characteristic flavour free from foreign odour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and any harmful substance.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Defective seeds	Not more than 5.0 percent by weight
(iii)	Moisture	Not more than 12.0 percent by weight
(iv)	Total ash on dry basis	Not more than 10.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight

(vi)	Volatile oil content on dry basis	Not less than 1.0 percent by v/w
(vii)	Edible seeds other than fennel	Absent
(viii)	Insect damaged matter	Not more than 1.0 percent by weight

3. Fennel (Saunf) powder means the powder obtained by grinding ripe fruits (seeds) of *Foeniculum Vulgare* P. Miller Var *Vulgare*. The powder shall have characteristic aromatic flavour free from off flavour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter and any harmful substance.

It shall conform to the following standards:—

(i)	Moisture	Not more than 12.0 percent by weight
(ii)	Total ash on dry basis	Not more than 9.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 2.0 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 1.0 percent by v/w

2.9.10: Fenugreek (Methi)

1. **Fenugreek (Methi) Whole** means the dried mature seeds of *Trigonella foenum graecum* L. The seeds shall be free from any off flavour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colour, and other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Moisture	Not more than 10.0 percent by weight
(iii)	Total ash on dry basis	Not more than 5.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight
(v)	Cold water soluble extract on dry basis	Not less than 30.0 percent by weight
(vii)	Edible seeds other than fenugreek	Not more than 2.0 percent by weight

(viii) Insect damaged matter	Not more than 1.0 percent by weight
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2. **Fenugreek (Methi) powder** means the powder obtained by grinding the dried mature seeds of *Trigonella foenum graecum* L. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colour and other harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 5.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 1.5 percent by weight
(iv)	Cold water soluble extract on dry basis	Not less than 30.0 percent by weight

2.9.11: ⁵⁶[Dried Ginger (Sonth, Dried Adrak)]

1. **Dried Ginger (Sonth, Dried Adrak)] whole** means the dried rhizome of *Zingiber officinale* Roscoe in pieces irregular in shape and size, pale brown in colour with peel not entirely removed and washed and dried in sun. It may be bleached with lime. It shall have characteristic taste and flavour free from musty odour or rancid or bitter taste. It shall be free from mould, living and dead insects, insect fragments, and rodent contamination. The product shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Moisture	Not more than 12.0 percent by weight
(iii)	Total ash on dry basis	
	(a) Unbleached	Not more than 8.0 percent by weight
	(b) Bleached	Not more than 12.0 percent by weight
(iv)	Calcium as Calcium oxide on dry basis	
	(a) Unbleached	Not more than 1.1 percent by weight
	(b) Bleached	Not more than 2.5 percent by weight

		weight
(v)	Volatile oil content on dry basis	Not less than 1.5 percent by v/w
(vi)	Insect damaged matter	Not more than 1.0 percent by weight

2. ⁵⁶[**Dried Ginger (Sonth, Dried Adrak)**] **Powder** means the powder obtained by grinding rhizome of *Zingiber officinale* Roscoe. It shall have characteristic taste and flavour free from musty odour or rancid or bitter taste. It shall be free from mould, living and dead insects, insect fragments, and rodent contamination. The powder shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Moisture	Not more than 12.0 percent by weight
(ii)	Total ash on dry basis	
	(a) Unbleached	Not more than 8.0 percent by weight
	(b) Bleached	Not more than 12.0 percent by weight
(iii)	Calcium as Calcium oxide on dry basis	
	(a) Unbleached	Not more than 1.1 percent by weight
	(b) Bleached	Not more than 2.5 percent by weight
(iv)	Volatile oil content on dry basis	⁵⁶ [Not less than 1.0 per cent]
(v)	Water soluble ash on dry basis	Not less than 1.7 percent by weight
(vi)	Acid insoluble ash on dry basis	Not more than 1.0 percent by weight
(vii)	Alcohol (90% v/w) soluble extract on dry basis	Not less than 5.1 percent by weight
(viii)	Cold water soluble extract on dry basis	⁵⁶ [Not less than 10.9 per cent]

2.9.12: Mace (Jaipatri)

1. **Mace (Jaipatri) whole** means the dried coat or aril of the seed of *Myristica fragrans* Houttuyn. It shall not contain the aril of any other variety of *Myristica nala* or *Fatua* (Bombay mace) and *Myristica argene* (Wild mace). It shall have characteristic aromatic flavour free from foreign odour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 0.5 percent by weight
(ii)	Moisture	Not more than 10.0 percent by weight
(iii)	Total ash on dry basis	Not more than 4.0 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis.	Not more than 0.5 percent by weight
(v)	Volatile oil content on dry basis	Not less than 7.5 percent by v/w
(vi)	Insect damaged matter	Not more than 1.0 percent by weight
(vii)	Nutmeg in mace	Not more than 1.0 percent by weight

2. **Mace (Jaipatri) powder** means the powder obtained by grinding dried coat or aril of the seed of *Myristica fragrans* Houttuyn. It shall have characteristic aromatic flavour free from foreign odour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter.

The powder shall conform to the following requirements:—

(i)	Moisture	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 3.0 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis	Not more than 0.5 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 5.0 percent by v/w
(v)	Crude fibre	Not more than 10.0 percent by weight
(vi)	Non-volatile ether extract	Not less than 20.0 and not more than 30.0 percent by weight.

2.9.13: Mustard (Rai, Sarson)

1. **Mustard (Rai, Sarson) whole** means the dried, clean mature seeds of

one or more of the plants of *Brassica alba*. (L). Boiss (Safed rai), *Brassica compestris* L.var, *dichotoma* (Kali Sarson), *Brassica Compestris*, L. Var, yellow Sarson, Syn, *Brassica compestris* L, var *glauca* (Pili Sarson), *Brassica, compestris* L. Var. *toria* (Toria), *Barassica juncea*, (L). Coss et Czern (Rai, Lotni) and *Brassica nigra* (L); Koch (Benarasi rai). It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from the seeds of *Argemone Maxicana* L, any other harmful substances and added colouring matter.

It shall conform to the following standards:

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Damaged or Shrivelled seeds	Not more than 2.0 percent by weight
(iii)	Moisture	Not more than 10.0 percent by weight
(iv)	Total ash on dry basis	Not more than 6.5 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis	Not more than 1.0 percent by weight
(vi)	Non volatile ether extract on dry basis	Not less than 28.0 percent by weight
(vii)	Violatile oil content on dry basis	Not less than 0.3 percent by v/w
(viii)	Insect damaged matter	Not more than 1.0 percent by weight
(ix)	Allyl iso thiocyanate (m/m) on dry basis	
	(a) B nigra	Not less than 1.0 percent by weight
	(b) B Juncea	Not less than 0.7 percent by weight
(x)	P-hydroxybenzyl iso-thiocyanate (m/m) on dry basis in <i>sinapist alba</i>	Not less than 2.3 percent by weight
(xi)	Argemone seeds	Absent

2. Mustard (Rai, Sarson) powder means the powder obtained by grinding dried, clean mature seeds of one or more of the plants of *Brassica alba*. (L). Boiss (Safed rai), *Brassica compestris* L. var, *dischotoma* (Kali Sarson), *Brassica Compestris*, L. Var, (yellow Sarson), Syn, *Brassica compestris* L, var *glauca* (Pili Sarson), *Brassica, compestris* L. Var. *toria* (Toria), *Barassicajuncea*,

(L). *Coss et Czern* (Rai, Lotni) and *Brassica nigra* (L); *Koch* (Benarasi rai) without addition of any other matter. It shall have characteristic pungent aromatic flavour free from rancidity and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from *Argemone maxicana*. L and other harmful substances. It shall also be free from added colouring matter.

It shall conform to the following standards:

(i)	Moisture	Not more than 7.0 percent by weight
(ii)	Total ash on dry basis	Not more than 6.5 percent by weight
(iii)	Ash insoluble in dilute HCl on dry basis.	Not more than 1.0 percent by weight
(iv)	Non volatile ether extract on dry basis	Not less than 28.0 percent by weight
(v)	Volatile oil content on dry basis	Not less than 0.3 percent by v/w
(vi)	Crude fibre	Not more than 8.0 percent by weight
(vii)	Starch	Not more than 2.5 per cent by weight
(viii)	Test for argemone oil	Negative

2.9.14: Nutmeg (Jaiphal)

1. **Nutmeg (Jaiphal)** whole means the dried seed (kernel) of *Myristica fragrans* Houttuyn. It shall be of greyish brown colour but it may be white if it has been subjected to liming. It shall have characteristic aromatic flavour free from foreign odour and mustiness. It shall be free from mould, living and dead insects, insect fragments, and rodent contamination. The product shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Absent
(ii)	Mace in Nutmeg	Not more than 3.0 percent by weight
(iii)	Moisture	Not more than 10.0 percent by weight
(iv)	Total ash on dry basis	Not more than 3.0 percent by weight
(v)	Water insoluble ash on dry basis	Not more than 1.5 percent by weight

(vi)	Ash insoluble in dilute HCl on dry basis.	Not more than 0.5 percent by weight
(vii)	Volatile oil content on dry basis	Not less than 6.5 percent by v/w
(viii)	⁸¹ [Omitted]	⁸¹ [Omitted]

2. **Nutmeg (Jaiphal) powder** means the powder obtained by grinding the dried seeds (kernel) or *Myristica fragrans* Houttuyn. It shall have characteristic aromatic flavour free from foreign odour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter.

It shall conform to the following standards: —

(i)	Moisture	Not more than 8.0 percent by weight
(ii)	Total ash on dry basis	Not more than 3.0 percent by weight
(iii)	Water insoluble ash on dry basis	Not more than 1.5 percent by weight
(iv)	Ash insoluble in dilute HCl on dry basis	Not more than 0.5 percent by weight
(v)	Volatile oil content on dry basis	Not less than 6.0 percent by v/w
(vi)	Crude Fibre	Not more than 10.0 percent by weight
(vii)	Non volatile ether extract on dry basis	Not less than 25.0 percent by weight

⁷⁵[**2.9.15 BLACK, WHITE & GREEN (BWG) PEPPERS.** - (1) Black, White & Green (BWG) peppers are the berries of *Piper nigrum*L. of the Piperaceae family having reached appropriate degree of development and/or maturity for the intended product purpose. Berries are treated in an appropriate manner to obtain the above products, by undergoing operations such as threshing, sieving and sifting, soaking, washing, blanching, drying or dehydrating, decorticating, grading, crushing and grinding. The product shall be free from foreign odours, flavours and free from any other harmful substances and added colours.

(a) **Black pepper** –It shall be dried berries having unbroken pericarp The product shall be whole with globular shape and wrinkled pericarp and shall have diameter of minimum 2.0 mm. It shall be brownish to dark brownish or blackish

in colour. The flavours shall have a penetrating odour and hot, biting pungent taste characteristics of black pepper excluding mouldy and rancid odours.

(b) **White pepper** – It shall be dried berries after removing the pericarp. The product shall be whole with globular shape with smooth surface, slightly flattened at one pole and a small protuberance at the other and shall have diameter of minimum 1.8 mm. It shall be matt grey to brownish to pale ivory white. The odour and flavour shall be characteristic of white pepper, slightly sharp and very aromatic, excluding mouldy and rancid odours.

(c) **Green pepper** –It shall be obtained from green berries by removal of moisture under controlled conditions. The product shall be whole with globular shape with or without wrinkled pericarp and shall have diameter of minimum 2.0 mm. It shall be characteristic green, greenish or dark greenish. The product shall have pungent odour and flavour characteristic of green pepper, free from rancidity, mustiness, bitter taste and extraneous flavour.

(2) BWG peppers can be of any one of the following forms:

(a) Whole

(b) Cracked/crushed –broken into two or more pieces.

(c) Ground–processed into powders.

(3) The product shall conform to the following requirements, namely: -

For Whole Peppers				
S. No.	Requirements	Black	White	Green
1.	Moisture content, percent by mass (<i>Maximum</i>)	13.0	12.0	12.0
2.	Total Ash, percent by mass on dry basis, (<i>Maximum</i>)	7.0	4.0	5.0
3.	Acid-insoluble ash, percent by mass on dry basis, (<i>Maximum</i>)	1.5	0.3	0.3
4.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	1.0	1.0	1.0

5.	Non-volatile ether extract, % (m/m) min, on dry basis.	6.0	6.0	0.3
6.	Piperine content, % (m/m), min, on dry basis.	2.0	3.0	NA
7.	Bulk density, (g/l), min.	400	550	NA
8.	Light berries, % (m/m) max.	10.0	2.0	NA
9.	Extraneous vegetable matter,% (m/m), max.	2.0	2.0	1.2
10.	Foreign matter, % (m/m), max.	0.5	0.5	0.5
11.	Black berries/corns % (m/m), max.	NA	10.0	5.0
12.	Broken berries, % (m/m), max.	NA	3.0	10.0
13.	Mouldy Berries, % (m/m), max.	3.0	3.0	2.0
14.	Insect defiled berries /Corns, % (m/m), max.	2.0	2.0	2.0
15.	Mammalian or/and other excreta, (mg/kg), max.	2.0	2.0	2.0
16.	Pinheads for black pepper, % (m/m), max.	4.0	NA	NA

For Ground/powdered/crushed pepper

S. No.	Requirements	Black	White
1.	Moisture content, % (m/m), max.	12.0	13.0
2.	Total ash by mass, % (m/m), on dry basis, max.	6.0	3.5
3.	Non-volatile ether extract, % (m/m) ,on dry basis, min.	6.0	6.0

4.	Volatile oil ^z , % (ml/100g), on dry basis, min.	1.0	0.7
5.	Crude fibre, insoluble index, % (m/m) on dry basis, max.	17.5	6.5
6.	Piperine, % (m/m), on dry basis, min.	2.0	3.0
7.	Acid insoluble ash, % (m/m) on dry basis, max.	1.2	0.3

Explanations: for the purpose of this clause,

- a) **Light berries** (in Black and White peppers only) -Generally immature berries without kernel with an apparent density lower than 0.30g/mL or 300 g/L.
- b) **Extraneous vegetative matter**-Vegetative matter associated with the plant from which the product originates -but is not accepted as part of the final product. Light berries, pinheads or broken berries are not considered as extraneous matter.
- c) **Foreign matter**-Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal
- d) **Pinheads**—Developed from unfertilized flowers, berries with a diameter of less than 2 mm with more angularity than normal berries, they have soft texture (collapse under heavy pressure) and have less odour and flavour than pepper berries.
- e) **Insect defiled berries:** Berries or corns damaged by insects.

(4) The product covered under these standards shall be labelled in accordance with the Food Safety and Standards (Labelling and Display) Regulation, 2020. In addition, the forms of the product shall also be mentioned on the label. The name of the product shall be “Black Pepper” (pepper corn), “White Pepper” or “Green Pepper”.]

2.9.16: Poppy (Khas Khas)

1. Poppy (Khas Khas) whole means the dried mature seeds of *Papaver somniferum* L. It may be white or greyish in colour with characteristic flavour free from off flavour, mustiness and rancidity. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and any other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Moisture	Not more than 11.0 percent by weight
(iii)	Non volatile ether extract on dry basis	Not less than 40.0 percent by weight

2.9.17: Saffron (Kesar)

1. **Saffron (Kesar)** means the dried stigmas or tops of styles of *Crocus Sativus* Linnaeus. It shall be dark red in colour with a slightly bitter and pungent flavour, free from foreign odour and mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Floral waste	Not more than 10.0 percent by weight
(iii)	Moisture and volatile matter at $103 \pm ^\circ\text{C}$	Not more than 12.0 percent by weight
(iv)	Total ash on dry basis	Not more than 8.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight
¹⁹ (vi)	Solubility in cold water on dry weight Basis	Not more than 65.0 percent by weight
(vii)	Bitterness expressed as direct reading of absorbance of picrocrocine at about 257 nm on dry basis	Not less than 30.0 percent by weight
(viii)	Safranal expressed as direct reading of absorbance of 330 nm on dry basis	Not less than 20.0 percent by weight and not more than 50.0 percent by weight
(ix)	Colouring strength expressed as direct reading of absorbance of 440 nm on dry basis	Not less than 80.0 percent by weight
(x)	Total Nitrogen on dry basis	Not more than 2.0 percent by weight
(xi)	Crude Fibre on dry basis	Not more than 6.0 percent by weight

Explanation:- Floral waste means yellow filaments that are unattached and

separated pollens, stamens, parts of ovaries and other parts of flowers of *Crocus sativus* Linnaeus.

2. **Saffron (Kesar) powder** means the powder obtained by crushing dried stigmas of *Crocus Sativus* Linnaeus. It shall be dark red in colour with a slightly bitter and pungent flavour, free from foreign odour and mustiness.

It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from added colouring matter.

It shall conform to the following standards: —

(i)	Moisture and volatile matter	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 8.0 percent by weight
(iii)	Acid insoluble ash on dry basis	Not more than 1.5 percent by weight
(iv)	Solubility in cold water on dry weight basis	Not more than 65.0 percent by weight
(v)	Bitterness expressed as direct reading of absorbance of picrocrocine at about 257 nm on Dry basis	Not less than 30.0 percent by weight
(vi)	Safranal expressed as direct reading of absorbance of 330 nm on dry basis	Not less than 20.0 percent by weight and not more than 50.0 percent by weight
(vii)	Colouring strength expressed as direct reading of absorbance of 440 nm on dry basis	Not less than 80.0 percent by weight
(viii)	Total Nitrogen on dry basis	Not more than 3.0 percent by weight
(ix)	Crude Fibre on dry basis	Not more than 6.0 percent by weight

2.9.18: Turmeric (Haldi)

1. **Turmeric (Haldi) whole** means the primary or secondary rhizomes commercially called bulbs or fingers of *Curcuma Longa* L. The rhizomes shall be cured by soaking them in boiling water and then drying them to avoid regeneration. The rhizome be in natural state or machine polished. The product shall have characteristic odour and flavour and shall be free from mustiness or other foreign flavours. It shall be free from mould, living and dead insects,

insect fragments, rodent contamination. The product shall be free from Lead Chromate added starch and any other extraneous colouring matter.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 1.0 percent by weight
(ii)	Defective Rhizomes	Not more than 5.0 percent by weight
(iii)	Moisture	Not more than 12.0 percent by weight
(iv)	Insect damaged matter	Not more than 1.0 percent by weight
(v)	Test for lead chromate	Negative

Explanation :- Defective rhizomes consist of shrivelled fingers and or bulbs internally damaged, hollow or porous rhizomes scorched by boiling and other types of damaged rhizomes.

2. **Turmeric (Haldi) powder** means the powder obtained by grinding dried rhizomes or bulbous roots of *Curcuma Longa L.* The powder shall have characteristic odour and flavour and shall be free from mustiness or other foreign odour. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The powder shall be free from any added colouring matter including Lead Chromate and morphologically extraneous matter including foreign starch.

It shall conform to the following standards:—

(i)	Moisture	Not more than 10.0 percent by weight
(ii)	Total ash on dry basis	Not more than 9.0 percent by weight
(iii)	Ash insoluble in dil. HCl on dry basis	Not more than 1.5 percent by weight
(iv)	Colouring power expressed as	Not less than 2.0 percent by weight
	curcuminoid content on dry basis	
(v)	Total Starch	Not more than 60.0 percent by weight
(vi)	Test for lead chromate	Negative

2.9.19: CURRY POWDER

1. **CURRY POWDER** means the powder obtained from grinding clean, dried and sound spices belonging to the group of aromatic herbs and seeds such

as black pepper, cinnamon, cloves, coriander, cardamom, chillies, cumin seeds, fenugreek, garlic, ginger, mustard, poppy seeds, turmeric, mace, nutmeg, curry leaves, white pepper, saffron and aniseeds. The material may contain added starch and edible common salt. The proportion of spices used in the preparation of curry powder shall be not less than 85.0 per cent by weight. The powder shall be free from dirt, mould growth and insect infestation. It shall be free from any added colouring matter and preservatives other than edible common salt.

The curry powder shall also conform to the following standards:—

Moisture	Not more than 14.0 percent by weight
Volatile oil	Not less than 0.25 percent (v/w) on dry basis
Non-volatile ether extract	Not less than 7.5 per cent by weight on dry basis.
Edible common salt	Not more than 5.0 per cent by weight on dry basis
Ash insoluble in dilute HCl	Not more than 2.0 per cent by weight on dry basis.
Crude Fibre	Not more than 15.0 percent by weight on dry basis
Lead	Not more than 10.0 p.p.m on dry basis

2.9.20: MIXED MASALA

1. **MIXED MASALA (WHOLE)** means a mixture of clean, dried and sound aromatic herbs and spices. It may also contain dried vegetables and/or fruits, oilseeds, garlic, ginger, poppy seeds and curry leaves. It shall be free from added colouring matter. It shall be free from mould growth and insect infestation. The proportion of extraneous matter shall not exceed five per cent by weight, out of which the proportion of organic matter including foreign edible seeds and inorganic matter shall not exceed three per cent and two per cent respectively.

⁶⁶[**2. MIXED MASALA POWDER.** - (1) “Mixed masala powder” means the powder obtained from grinding clean and dried spices and herbs, including their extracts, which may contain ingredients such as edible starches, edible salt, dried fruits and vegetables or their products, edible vegetable oil and fats or their products, nuts and their products, cereals and pulses or their products, nutritive sweeteners or other ingredients suitable to the product.

(2) All the above ingredients shall either be standardised or permitted for use in the preparation of other standardised food under these regulations.

(3) The spices and herbs covered under ISO, Codex, Spices Board and Food Safety and Standards (Food or Health Supplements, Nutraceuticals, Foods for Special Dietary Uses, Foods for Special Medical Purpose, Functional Foods and Novel Food) Regulations, 2016 may also be used, which shall be free from extraneous matter, mould growth, and insect infestation.

(4) It shall meet the following requirements, namely: -

Sr. No.	Characteristic	Requirement		
		(A)	(B)	(C)
(i)	Spice Content, per cent. by mass (<i>Minimum</i>)	85.0	40.0	25.0
(ii)	Moisture, per cent. by mass (<i>Maximum</i>)	12.0	12.0	12.0
(iii)	Volatile oil, per cent. volume by mass (on dry basis) (<i>Minimum</i>)	0.4	0.2	0.1
(iv)	Acid Insoluble Ash per cent by mass (on dry basis) (<i>Maximum</i>)	2.0	2.0	2.0

(5) The minimum percentage of “Spice Content” shall be mentioned on the label and the parameters and their limits specified against serial number (ii) to (iv) of the table in sub-clause (4) shall be applicable as per the minimum spice content specified therein.

(6) In addition, the name of the specific product such as chana masala, sambar Masala may also be mentioned and the salt content above 5 per cent shall be declared on the label.]

2.9.21: Aniseed (Saunf)

1. **Aniseed (Saunf) whole** means the dried and mature fruit of *Pimpinella anisum* L. It shall have characteristic aromatic flavour and shall be free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Shrivelled, immature, damaged / insect damaged / broken fruit	Not more than 5.0 percent by weight
(iii)	Moisture	Not more than 12.0 percent by weight
(iv)	Total ash on dry basis	Not more than 9.0 percent by weight
(v)	Ash insoluble in dilute HCl on dry basis	Not more than 1.5 percent by weight
(vi)	Volatile oil content on dry basis	Not less than 1.0 percent by v/w
(vii)	Insect damaged matter	Not more than 1.0 percent by weight
(viii)	Foreign edible seeds	Not more than 2.0 percent by weight

2.9.22: Ajowan (Bishops seed)

1. **Ajowan (Bishops seed)** means the dried ripe fruits (seeds) of *Trachyspermum ammi*. L Sprague. It shall have characteristic aromatic flavour and shall be free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and any other harmful substances.

It shall conform to the following standards:—

(i)	Moisture	Not more than 11.0 percent by weight
(ii)	Extraneous matter	Not more than 2.0 percent by weight
(iii)	Shrivelled / Damaged / insect damaged / broken fruit	Not more than 2.0 percent by weight
(iv)	Volatile oil content on dry basis	Not less than 1.5 percent v/w

2.9.23: Dried Mango Slices

1. **Dried Mango Slices**--Means the dried wholesome, edible part of raw mango fruit with or without the outer skin. It shall be free from fungus, moulds and insect infestation, rodent contamination, added colouring, flavouring matter. It shall also be free from deleterious substances injurious to health. It shall not contain any preservative except edible common salt which may be

added to the extent of 5 per cent by weight on dry basis. It shall have characteristic taste and flavour. The proportion of extraneous substance shall not exceed 4 per cent by weight out of which inorganic matter shall not exceed 2 per cent by weight.

It shall also conform to the following standards, namely :—

Moisture	Not more than 12 per cent by weight.
Damaged slices	Not more than 5 per cent by weight.
Seed Coatings	Not more than 6 per cent by weight.

Explanation:

- (i) Seed coatings shall be exterior covering of the seed.
- (ii) Damaged slices mean the slices that are eaten by weevils or other insects and includes slices internally damaged by fungus, moisture or heating.

2.9.24 Dried Mango Powder (Amchur)

1. **Dried Mango Powder (Amchur)**--Means the powder obtained by grinding clean and dried mango slices having characteristic taste and flavour. It shall be free from musty odour and objectionable flavour, rodent contamination, mould, fungus and insect infestation, extraneous matter and added colouring, flavouring matter. It shall also be free from deleterious substances injurious to health. It shall not contain any preservative except edible common salt which may be added to the extent of 5 per cent by weight on dry basis.

It shall also conform to the following standards, namely:—		
(a)	Moisture	Not more than 12 per cent by Weight
(b)	Total ash (salt free basis)	Not more than 6 per cent by weight
(c)	Ash insoluble in dilute HCl	Not more than 1.5 per cent by weight
(d)	Crude fibre	Not more than 6 per cent by weight
(e)	Acidity as anhydrous tartaric acid	Not less than 12 per cent and not more than 26 percent by weight

2.9.26: Garlic (Lahsun)

1. **Dried (Dehydrated) Garlic (Lahsun)** means the product obtained by drying by any suitable method which ensures characteristics of fresh garlic on rehydration the cloves of *Allium sativum* L. without bleaching or precooking. It shall be white to pale cream in colour, free from scorched, toasted and baked particles. It may be whole, sliced, quarters, pieces, flakes, kibbled, granules or powdered. The product on rehydration shall have characteristic pungent of odour of garlic, free from off odour, mustiness fermentation and rancidity. It

shall be free from mould, living and dead insects, insect fragments, rodent contamination and fungal infection. The products shall be free from added colouring matter and any other harmful substances. It shall be free from stalks, peels, stems, and extraneous matter. When in powdered form, it shall be free flowing and free from agglomerates.

The products may contain food additives permitted in these regulations including Appendix - A and it shall conform to the following standards, namely:—

(i)	Extraneous matter	Not more than 0.5 percent
(ii)	Moisture	
	a. In case of powdered Garlic	Not more than 5.0 percent by weight
	b. other than powdered Garlic	Not more than 8.0 percent by weight
(iii)	Total ash on dry basis	Not more than 5.0 percent by dry weight
(iv)	Ash insoluble in dil HCl	Not more than 0.5 percent by weight
(v)	Cold water soluble extract on dry basis	Not less than 70.0 and not more than 90.0 percent by weight
(vi)	Volatile organic sulphur compound on dry basis	Not less than 0.3 percent by weight
(vii)	Peroxidase test	Negative

2.9.27: Celery

1. Celery whole means the dried ripe fruits (seeds) of *Apium graveoleans* L. It shall be of uniform colour with characteristic aromatic flavour and shall be free from mustiness. It shall be free from mould, living and dead insects, insect fragments, rodent contamination. The product shall be free from added colouring matter and any other harmful substances.

It shall conform to the following standards:—

(i)	Extraneous matter	Not more than 2.0 percent by weight
(ii)	Moisture	Not more than 10.0 percent by weight

2.9.28: Dehydrated Onion (Sukha Pyaj)

1. **Dehydrated Onion (Sukha Pyaj)** - means the product obtained by removal of most moisture by any acceptable method which ensures characteristics of fresh onions on rehydration, from sound bulbs of *Allium cepa*.L. free from mould, disease, outer skin, leaves and roots. The product may be whole or in the form of slices, rings, flakes, pieces, small grits or powder.

The product may be white/cream/pink or red in colour, free from stalks, peels, stems and extraneous matters and scorched particles. The finished product shall be free from discolouration or enzymatic reaction. The product on rehydration shall be of characteristic flavour, free from foreign and off flavour, mustiness, fermentation and rancid flavour.

It shall be free from mould, living and dead insects, insect fragments and rodent contamination. The product shall be free from added colouring matter and any other harmful substances. When in powdered form, it shall be free flowing and free from agglomerates.

The products may contain food additives permitted in these regulations including Appendix - A and it shall conform to the following standards, namely:—

Extraneous matter	Not more than 0.5 percent by weight
Moisture:	
(a) In case of powdered onion	Not more than 5.0 percent by weight
(b) Other than powdered onion	Not more than 8.0 percent by weight
Total Ash on dry basis	Not more than 5.0 percent by weight
Ash insoluble in dil HCl	Not more than 0.5 percent by weight
Peroxidase	Negative

2.9.29 Asafoetida

ASAFOETIDA (Hing or Hingra) means the oleogumresin obtained from the rhizome and roots of *Ferula alliaces*, *Ferula rubricaulis* and other species of *Ferula*. It shall not contain any colophony resin, galbanum resin, ammoniacum resin or any other foreign resin. Hing shall conform to the following standards, namely:

- (1) Total ash content shall not exceed 15 per cent by weight.
- (2) Ash insoluble in dilute hydrochloric acid shall not exceed 2.5 per cent by weight.
- (3) The alcoholic extract (with 90 per cent alcohol) shall not be less than 12 per cent as estimated by the U.S.P. 1936 method.
- (4) Starch shall not exceed 1 per cent by weight.

Hingra shall conform to the following standards namely:—

- (1) The total ash content shall not exceed 20 per cent by weight.
- (2) Ash insoluble in dilute hydrochloric acid shall not exceed 8 per cent by weight.
- (3) The alcoholic extract (with 90 per cent alcohol) shall not be less than 50 per cent as estimated by the U.S.P. 1936 method.
- (4) Starch shall not exceed 1 per cent by weight.

Compounded asafoetida or Bandhani Hing is composed of one or more varieties of asafoetida (Irani or Pathani Hing or both) and gum arabic, edible starches or edible cereal flour.

It shall not contain:—

- (a) colophony resin,
- (b) galbanum resin,
- (c) ammoniacum resin,
- (d) any other foreign resin,
- (e) coal tar dyes,
- (f) mineral pigment,
- (g) more than 10 per cent total ash content,
- (h) more than 1.5 per cent ash insoluble in dilute hydrochloric acid,
- (i) less than 5 per cent alcoholic extract, (with 90 per cent of alcohol) as estimated by the U.S.P. 1936 method.

2.9.30 EDIBLE COMMON SALT:

1. **EDIBLE COMMON SALT** means a crystalline solid, white, pale, pink or light grey in colour free from contamination with clay, grit and other extraneous adulterant and impurities. It shall not contain moisture in excess of six per cent of the weight of the undried sample. The sodium chloride content (as NaCl) and matter soluble in water other than sodium chloride on dry weight basis shall be as specified in columns (2) and (3) of the Table below against the period of validity mentioned in the corresponding entry in column (1) of the said Table. The matter insoluble in water shall not exceed 1.0 per cent by weight on dry weight basis.

Period of Validity	Minimum percentage of sodium chloride content as NaCl (on dry basis)	Maximum Percentage of matter soluble in water other than sodium chloride (on dry basis)
Upto 31-3-1982	94.0	5.0
From 1-4-1982 to 31-3-1983	94.5	4.5
From 1-4-1983 to 31-3-1984	95.0	4.0
From 1-4-1984 to 31-3-1985	95.5	3.5
From 1-4-1985 onwards	96.0	3.0

The product may contain food additives permitted in these regulations including Appendix A. The total matter insoluble in water where an anticaking agent has been added shall not exceed 2.2 percent and sodium chloride content on dry basis shall not be less than 97.0 percent by weight.

2. ⁷⁰[Omitted]

3. ⁷⁰[Omitted]

4. **POTASSIUM IODATE** means a crystalline powder, white in colour free from impurities. It shall conform to the following standards namely: —

1.	Potassium Iodate (as KIO ₃) percent by weight	Not less than 99.0
2.	Solubility	Soluble in '30 Parts of water
3.	Iodine (as I) per cent by wt. not more than	0.002
4.	Sulphate (as SO ₄) per cent by wt. not more than	0.02
5.	Bromate, bromide, chlorate & chloride percent by wt. not more than	0.01
6.	Matter insoluble in water percent by wt. not more than	0.10
7.	Loss on drying percent by wt. not more than	0.1
8.	PH (5 percent solution)	Neutral
9.	Heavy metal (as Pb) ppm not more than	10
10.	Arsenic (as As) ppm not more than	3
11.	Iron (as Fe) ppm not more than	10

5. **Iron Fortified Iodized Salt (double fortified salt)** means a crushed Crystalline Solid; white or pale or pink or light grey in colour, free from contamination with clay and other extraneous adulterants and impurities.
^{4,81}[Salt used for the manufacture of double fortified salt shall have minimum

99.0 percent sodium chloride content on dry weight basis when the source of nutrients in non-encapsulated form is used for fortification; minimum 98 per cent sodium chloride content on dry weight basis when the source of nutrients in encapsulated form is used for fortification] and moisture not more than 1.5 percent and it shall conform to the following standards namely:-

Moisture	Not more than 1.5 per cent by weight
Water insoluble matter	Not more than 1.0% on dry weight basis.
Chloride content (as NaCl)	Not less than 97.0% on dry weight basis
Matter insoluble in dilute HCl	Not more than 0.30 % on dry weight basis
Matter soluble in water other than Nacl	Not more than 2.5% on dry weight basis
⁷⁰ [Omitted]	
⁴ [Phosphorous as P ₂ O ₅	Not more than 3100 parts per million]
Sulphate as (SO ₄)	Not more than 1.1% by weight.
Magnesium as (Mg) water soluble	Not more than 0.10% by weight

⁴⁴ [omitted]

⁴[Provided that double fortified salt may contain food additives permitted in Appendix A and Hydroxy Propyl Methyl Cellulose, Titanium dioxide, fully Hydrogenated Soyabean oil and Sodium hexametaphosphate (all food grades) at concentration of not more than GMP and anti –caking agent not more than 2.0 per cent on dry weight basis, and the water insoluble matter wherein anti-caking is used shall not exceed 2.2 percent.]

³⁰[**6.Salt Substitutes.-** (1) The composition of salt substitutes shall be as follows:

(a)	Potassium sulphate, potassium, calcium or ammonium salts of adipic, glutamic, carbonic,	GMP, except that Phosphorus not
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	succinic, lactic, tartaric, citric, acetic, hydrochloric or ortho phosphoric acids, and/or	to exceed 4 per cent. m/m and NH_4^+ 3 per cent. m/m of the salt substitute mixture
(b)	Magnesium salts of adipic, glutamic, carbonic, citric, succinic, acetic, tartaric, lactic, hydrochloric or orthophosphoric acids, mixed with other Mg-free salt substitutes as listed in 6.(1)(a), 6.(1)(c) and 6.(1)(d), and/or	Mg^{++} to be not more than 20 per cent. m/m of the total of the cations K^+ , Ca^{++} and NH_4^+ present in the salt substitute mixture and Phosphorus not to exceed 4 per cent. m/m of the salt substitute mixture
(c)	Choline salts of acetic, carbonic, lactic, tartaric, citric or hydrochloric acids, mixed with other choline-free salt substitutes as listed in 6.(1) (a), 6.(1)(b) and 6.(1)(d), and/or	The choline content not to exceed 3 per cent. m/m of the salt substitute mixture
(d)	Free adipic, glutamic, citric, lactic or malic acids	GMP

(2) Salt substitutes may contain:

- (a) Colloidal silica or calcium silicate: not more than one per cent. m/m of the salt substitute mixture, individually or in combination.
- (b) Diluents: safe and suitable nutritive foods as normally consumed namely, sugars, cereal flour.

(3) The addition of iodine-containing compounds to salt substitutes shall be as per the Foods Safety and Standards Regulations, 2011.

(4) The sodium content of salt substitutes shall be not more than 120 mg/100 g of the salt substitute mixture.

(5) Salt substitutes shall conform to the following specific provisions for the labelling in addition to the Food Safety and Standards (Packaging and Labelling) Regulations, 2011, namely:-

- (a) a declaration on the label as “low sodium salt substitute” or “low sodium dietetic salt”;
- (b) a declaration on the label regarding the amount of cations (that is, sodium, potassium, calcium, magnesium, ammonium and choline/100 g (m/m) in the salt substitute mixture.)

³²[**2.9.31 SEASONING**

1. Description: (a) Seasoning is intended to enhance flavour.

(b) It may contain ingredients such as spices, condiments and herbs including their extracts, salt, fruits and vegetables or their products or extracts, dry fruits, nuts and raisins or their products, edible starches, yeast and its product including yeast extract, soya and its products, hydrolyzed protein or their products, meat, poultry, marine, aquatic and their products, edible vegetable oils and fats, cereal and cereal products, milk and milk products, nutritive sweeteners or any other suitable ingredient whose standards are prescribed in Food Safety and Standards (Food Product Standards and Food Additives) Regulations, 2011

(c) The ingredients referred to in clause (b) shall conform to the standards, wherever prescribed under these regulations.

(d) The product shall also conform to the following requirements, namely:-

Sr. No.	Characteristic	Requirement
1.	*Moisture % (by weight) (Maximum)	10.0
2.	Acid Insoluble Ash in dilute HCl % (on dry basis) (Maximum)	2.0

*Does not apply to seasonings such as paste of tomato, ginger, garlic, chili, etc., Seasoning may be added directly or packed separately with the product.

2. Food additives:

The product may contain food additives permitted in Appendix A.

3. Contaminants, toxins and residues:

The product covered in this standard shall comply with the Food Safety and Standards (Contaminants, toxins and Residues) Regulations, 2011.

4. Hygiene:

(a) The products shall be prepared and handled in accordance with the guidance provided in the Schedule 4 of the Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011 and any other such guidance provided from time to time under the provisions of the Food Safety and Standards Act, 2006 (34 of 2006).

(b) The product shall conform to the microbiological requirement given in Appendix B.

5. Labelling:

The product covered by this standard shall be labelled in accordance with the Food Safety and Standards (Packaging and Labelling) Regulation, 2011.

6. Method of analysis:

The product shall be analysed as provided in the relevant Food Safety and Standards Authority of India Manual of Method of Analysis of Food.]

⁶⁶[**2.9.32 SPICE OLEORESINS.**- (1) “Spice Oleoresins” means the volatile and non-volatile constituents of spices or herbs, which shall be obtained by extraction of the spice or herb with permitted food grade solvents, either singly or in combination, followed by separation of solvents and volatile portion.

(2) The non-volatile portion after separation of the solvent shall be added back to the volatile portion.

(3) The list of permitted food grade solvents and their residual limits are specified in the Table given below:

Sr. No.	Solvent	Limit (<i>Maximum</i> , in ppm)
	Acetone	30
	Ethyl acetate	50
	n-Hexane	25
	Isopropyl alcohol	30
	Methyl alcohol	50

	Carbon dioxide	GMP
	Water	GMP
	Diethyl ether	2
	Ethyl alcohol	GMP
	Butan-1-ol (Butyl alcohol)	2
	Butan-2-ol	2
	Propan-1-ol (Propyl alcohol)	1
	Methyl tert-butyl ether	2

(4) Spice Oleoresin shall meet the requirements as specified in the Table given below:

Sr. No.	Spice Oleoresin	Botanical name of spice or herb	Active component	Volatile Oil Content (VOC in ml/100g of oleoresin) (Not less than)
(i)	Ajowan (Bishop's weed)	<i>Trachyspermum ammi</i> L.	Thymol	1.5
(ii)	Allspice	<i>Pimentadioica</i> (L) Merr.	Eugenol	20.0
(iii)	Anisoon (Aniseed)	<i>Pimpinellaanisum</i> L.	Anethole and fenchone	9.0
(iv)	Sweet Basil (Niazbo)	<i>Ocimumbasilicum</i> L.	E-Beta-CaryoPhyllene (BCP)	4.0
(v)	Lal Mirchi ¹ (Chilli) or Capsicum	<i>Capsicum frutescens</i> L. or <i>Capsicum annum</i> L.	Capsaicin	-

(vi)	Siahjira (Caraway)	<i>Carum carvi</i> L.	Carvone, Carveol and Hydrocarvone	10.0
(vii)	Chhoti Elaichi (Cardamom Small)	<i>Elettaria cardamomum</i> Maton	1,8-cineole and α -terpinyl acetate	10.0
(viii)	Ajmoda (Celery)	<i>Apium graveolens</i> L.	d- limonene and sedanolides	7.0
(ix)	Dalchini (Cinnamon Bark)	<i>Cinnamomum zeylanicum</i>	Cinnamaldehyde	2.0
(x)	Laung (Clove)	<i>Syzygium aromaticum</i> (L) Merr. & Perry	Eugenol	12.0
(xi)	Dhania (Coriander)	<i>Coriandrum sativum</i> L.	Linalool	1.0
(xii)	Safed Zeera (Cumin)	<i>Cuminum cyminum</i> L.	Cuminaldehyde	10.0
(xiii)	Shatpushp, Sowa (Dillseed)	<i>Anethum graveolens</i> L. or <i>Anethum sowa</i> Roxb. ex Fleming	Apiole and dillapiole	10.0
(xiv)	Saunf (Fennel)	<i>Foeniculum vulgare</i> Mill.	Anethole	3.0
(xv)	Adrak (Ginger)	<i>Zingiber officinale</i> Roscoe	Gingerol	10.0
(xvi)	Habbulgar (Laurel Leaf / Bay Leaf)	<i>Laurus nobilis</i> L.	1,8-cineole, linalool, α - terpinyl acetate and methyl eugenol	5.0
(xvii)	Jaipatri (Mace)	<i>Myristica fragrans</i> Houtt.	Sabinene and Pinenes	10.0
(xviii)	Marjoram Sweet	<i>Marjorana hortensis</i> Moench.	Pinenes, Ethereal oil	8.0
(xix)	Jaiphal (Nutmeg)	<i>Myristica fragrans</i> Houtt.	Sabinene and Pinenes	10.0

(xx)	Marua-Jangli/ Marubak (Oregano)	<i>Origanum vulgare</i> L.	Carvacrol, Thymol, Eugenol, Rosmarinic acid	20.0
(xxi)	Paprika ²	<i>Capsicum</i> <i>annuum</i> L.	Capsaicin	-
(xxii)	Parsley Leaf	<i>Petroselinum</i> <i>crispum</i> Mill.	Myristicin and Apiole	2.0
(xxiii)	Parsley Seed	<i>Petroselinum</i> <i>crispum</i> Mill.	Myristicin and Apiole	2.0
(xxiv)	Rosemary	<i>Rosmarinus</i> <i>officinalis</i> L.	Carnosic acid and Carnosol	2.0
(xxv)	Chakra Phool (Star Anise)	<i>Illicium</i> <i>verum</i> Hook.	Anethole	9.0
(xxvi)	Thyme	<i>Thymus</i> <i>vulgaris</i> L.	Thymol	5.0
(xxvii)	Kalimirch (Black Pepper)/ Safedmirch (White Pepper)	<i>Piper</i> <i>nigrum</i> L.	Piperine	10.0
(xxviii)	Haldi (Turmeric)	<i>Curcuma</i> <i>longa</i> L.	Curcuminoid Content, percent by mass, on dry basis (<i>Minimum</i>)- 3.5	

¹Color Value (expressed as Nesslerimetric units): 4000 – 20,000

¹Scoville Heat Units, *Min*: 240000

²Color Value in ASTA Color Units (CU):250 -5000

Note: The name of active component and the volatile oil shall be declared on the label.

2.9.33 TEJPAT.-(1) "Tejpat" means the dried leaves of the tree *Cinnamomum tamala*, Nees and Ebermof family *lauraceae*, which shall have characteristic aroma and shall be clean and free from musty odour, off-flavor, mould growth, insect infestation, rodent contamination and other impurities except to the extent as per the requirements given below.

(2) It shall be free from admixture of leaves other than Tejpat.

(3) It shall conform to the following requirements, namely:-

S.No	Characteristics	Requirements
(i)	Moisture content, per cent. by mass, on dry basis(<i>Maximum</i>)	10.0
(ii)	Extraneous matter, per cent. by mass, on dry basis (<i>Maximum</i>)	1.0
(iii)	Shrivelled and discoloured leaves, per cent. by mass, on dry basis(<i>Maximum</i>)	10.0
(iv)	Cut and broken leaves, per cent. by mass, on dry basis(<i>Maximum</i>)	20.0
(v)	Insect bored and diseased leaves, per cent. by mass, on dry basis(<i>Maximum</i>)	10.0
(vi)	Twigs, leafstalk, per cent. by mass, on dry basis (<i>Maximum</i>)	5.0
(vii)	Volatile oil content, (ml/100g) on dry basis (<i>Minimum</i>)	0.5
(viii)	Uric acid, mg/kg, on dry basis (<i>Maximum</i>)	100.0

Explanation.- For the purpose of this sub-regulation,-

- (a) “extraneous matter” means stones, dust, other dirt and all organic and vegetable matters not of Tejpat origin;
- (b) “shrivelled and discoloured leaves” means leaves that are discoloured or not properly developed which materially affect the quality, shrivelled leaves do not include small and tender leaves;
- (c) “insect board and diseased leaves” that are partly or wholly bored or eaten by insects or diseased;
- (d) “twigs and leaf stalk” means small branches and stalks attached with the tejpat leaves.

2.9.34 STAR ANISE.- (1) “Star Anise” means the dried mature fruit of the tree *Illiciumverum* Hook. of the family *Illiciaceae*, which shall comprise of boat-shaped follicles arranged radially around a central stalk.

(2) The colour of star anise shall be brownish red or reddish brown and shall have a characteristic odour and an aromatic, sweet and anise-like flavour.

(3) It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

(4) It shall conform to the following requirements, namely:-

S. No	Characteristics	Requirements
(i)	Extraneous matter, per cent. by mass on dry basis(<i>Maximum</i>)	1.0
(ii)	Stalks, per cent. by mass on dry basis(<i>Maximum</i>)	3.0
(iii)	Broken and abnormal fruits, per cent. by mass on dry basis(<i>Maximum</i>)	25.0
(iv)	Moisture content, per cent. by mass on dry basis(<i>Maximum</i>)	10.0
(v)	Acid insoluble ash, per cent. by mass on dry basis (<i>Maximum</i>)	1.0
(vi)	Volatile oil, per cent. (ml/100 g) on dry basis (<i>Minimum</i>)	8.0

Explanation.- For the purposes of this sub-regulation.-

- (a) “extraneous matter” means all that does not belong to the star anise fruit and all other extraneous matter of animal, vegetable or mineral origin;
- (b) “broken fruits” are those which contain fewer than five follicles;
- (c) “abnormal or undeveloped fruits” are those containing three or more under-developed follicles.]

⁵⁹[2.9.35 Dried Oregano

(1) **Dried Oregano Whole** means the leaves of the *Origanum* genus, species and sub-species, excluding *Origanum majorana*, belonging to the *Lamiaceae* (*Labiatae*) family. The colour of the dried leaves shall be light greyish green to

olive green. It shall be free from yellow or brown leaf, and from dust and fine particles. It shall have characteristic odour and flavour. It shall be free from mustiness and other foreign flavours. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements:

Sl. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (Maximum)	12.0
2.	Extraneous vegetable matter, percent by mass, (Maximum)	3.0
3.	Foreign Matter, percent by mass, on dry basis (Maximum)	0.2
4.	Acid-insoluble ash, percent by mass on dry basis (Maximum)	2.0
5.	Volatile oil content, ml/100g, on dry basis (Minimum)	1.8

Explanation- (i) **Extraneous Vegetable Matter** - Vegetative matter associated with the plant from which the product originates.

(ii) **Foreign matter** means any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, and any other material.

(2) **Dried Oregano Powder** means the powder obtained by grinding leaves of the *Origanum* genus, species and sub-species, excluding *Origanum majorana*, belonging to the *Lamiaceae (Labiatae)* family. It shall have characteristic odour and flavour. It shall be free from mustiness and other foreign flavours. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall also conform to the following requirements, namely:-

Sl.	Characteristics	Requirements
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No.		
1.	Moisture content, percent by mass (<i>Maximum</i>)	12.0
2.	Acid insoluble ash, percent by mass on dry basis (<i>Maximum</i>)	2.0
3.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	1.5

2.9.36 Pimento or Allspice

(1) Pimento or Allspice Whole means the dried, whole berry of *Pimenta dioica* (L.) Merr. It shall be dark brown in colour. It shall have a mixed flavour of four spices - clove, cinnamon, nutmeg and pepper. It shall be free from any foreign taste or odour, including rancidity or mustiness. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sl. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (<i>Maximum</i>)	12.0
2.	Extraneous vegetable matter, percent by mass, (<i>Maximum</i>)	1.0
3.	Broken berries, percent by mass, on dry basis (<i>Maximum</i>)	2.0
4.	Foreign matter, percent by mass, on dry basis (<i>Maximum</i>)	0.2
5.	Acid-insoluble ash, percent by mass on dry basis, (<i>Maximum</i>)	1.0
6.	Volatile oil content, ml/100g, on dry basis	2.0

	(<i>Minimum</i>)	
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Explanation .- (i) **Extraneous Vegetable Matter** - Vegetative matter associated with the plant from which the product originates.

(ii) **Foreign matter** means any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, and any other material.

(2) **Pimento or Allspice Powder** means the powder obtained by grinding dried berries of *Pimenta dioica* (L.) Merr. It shall be in the form of homogeneous dark brown powder. It shall have a mixed flavour of four spices – clove, cinnamon, nutmeg and pepper. It shall be free from any foreign taste or odour, including rancidity or mustiness. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sr. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (<i>Maximum</i>)	12.0
2.	Acid insoluble ash, percent by mass, on dry basis (<i>Maximum</i>)	1.0
3.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	1.0
4.	Non-volatile ether extract, percent by mass, on dry basis (<i>Maximum</i>)	8.5
5.	Crude fibre, percent by mass, on dry basis (<i>Maximum</i>)	27.5

2.9.37 Dried Laurel or Dried Bay Leaf -

(1) **Dried Laurel or Dried Bay Leaf Whole** means the dried leaf of the tree *Laurus nobilis* L. The laurel leaf is oblong and pointed at the tip with a short petiole. The leaf is soft, shiny on the surface and dull underneath. It shall have pleasant, strong and delicate odour which emanates strongly when the leaf is crushed. It shall have characteristic flavour. It shall be free from any extraneous

odour; in particular mustiness. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sr. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (<i>Maximum</i>)	8.0
2.	Extraneous vegetable matter, percent by mass, on dry basis (<i>Maximum</i>)	2.0
3.	Foreign Matter, percent by mass, on dry basis (<i>Maximum</i>)	0.2
4.	Acid-insoluble ash, percent by mass on dry basis (<i>Maximum</i>)	2.0
5.	Volatile oil content, ml/100 g, on dry basis, (<i>Minimum</i>)	1.0

Explanation.- (i) **Extraneous Vegetable Matter** - Vegetative matter associated with the plant from which the product originates.

(ii) **Foreign matter** means any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, and other foreign matters.

(2) **Dried Laurel or Dried Bay Leaf Powder** means the powder obtained by grinding dried leaf of the tree *Laurus nobilis* L. It shall have pleasant, strong and delicate odour which emanates strongly when the leaf is crushed. It shall have characteristic flavour. It shall be free from any extraneous odour, in particular mustiness. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sr. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (<i>Maximum</i>)	8.0

2.	Acid insoluble ash, percent by mass, on dry basis (<i>Maximum</i>)	2.0
3.	Volatile oil content, ml/100g, on dry basis, (<i>Minimum</i>)	0.8
4.	Crude fibre content, percent by mass, on dry basis (<i>Maximum</i>)	30.0

2.9.38 Dried Mint

Dried mint means dried leaves or broken or crushed leaves of *Mentha spicata* Linnaeus syn. /*Mentha viridis* Linnaeus. It shall have characteristic odour and flavour and shall be free from mustiness and other foreign flavours. It shall be free from living insects and moulds and shall be free from dead insects, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sr. No.	Characteristics	Requirements
1.	Moisture content, percent by mass (<i>Maximum</i>)	13.0
2.	Foreign matter, percent by mass, (<i>Maximum</i>)	1.0
3.	Extraneous vegetable matter percent by mass (<i>Maximum</i>)	3.0
4.	Total ash percent by mass on dry basis (<i>Maximum</i>)	12.0
5.	Acid-insoluble ash, percent by mass on dry basis (<i>Maximum</i>)	2.5
6.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	0.5

Explanation.- (i) **Foreign Matter** means any matter or material not usually associated with the product.

(ii) **Extraneous vegetable matter** means any vegetative matter associated with the plant from which the product originates.

2.9.39 Dried Rosemary.- Dried rosemary means dried leaves of the species *Rosmarinus officinalis* L., belonging to the family *Lamiaceae*. It shall have

characteristic colour, odour and flavour. It shall be free from any foreign taste or odour, including rancidity or mustiness. It shall be free from living and dead insects, moulds, insect fragments and rodent contamination visible to the naked eye.

It shall conform to the following requirements, namely:-

Sr. No.	Characteristics	Requirements
i.	Moisture content, percent by mass (<i>Maximum</i>)	11.0
ii.	Foreign matter, percent by mass (<i>Maximum</i>)	1.0
iii.	Extraneous vegetable matter, percent by mass (<i>Maximum</i>)	3.0
iv.	Brown leaves, percent by mass, on dry basis (<i>Maximum</i>)	10.0
v.	Total Ash, percent by mass on dry basis, (<i>Maximum</i>)	8.0
vi.	Acid-insoluble ash, percent by mass on dry basis, (<i>Maximum</i>)	1.0
vii.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	0.8

Explanation.- (i) Foreign matter means any matter or material not usually associated with the product.

(ii) **Extraneous vegetable matter** means any vegetative matter associated with the plant from which the product originates.

(iii) **Brown leaves** means the leaves of plant which die during growing season and are brown in colour.]

⁷³[**2.9.40 DRIED THYME.** - (1) Dried thyme is the product prepared from leaves/ flowers of *Thymus* spp. of lamiaceae family. Dried thyme shall have a characteristic odour and flavour of volatile oil (such as thymol, carvacrol, and linalool), which can vary depending on geoclimatic factors/conditions. Dried thyme shall be free from any foreign odour or flavour and especially from mustiness. Dried thyme shall have a characteristic colour varying from green

ash to brownish grey. It shall be free from living insects.

(2) It may be presented in following styles:

(a) Whole or intact.

(b) Crushed or rubbed: processed into varying degrees ranging from a coarse to fine crush.

(c) Ground: processed into powders.

(3) It shall conform to the following requirements, namely:-

TABLE

S. No.	Requirements	Limits
1.	Moisture content, percent by mass (maximum)	12.0
2.	Extraneous vegetable matter, percent by mass, (maximum)	0.5
3.	Foreign matter, percent by mass, (maximum)	0.5
4.	Insect damaged leaves/ flowers, percent by mass, (maximum)	1.0
5.	Dead insects, Insect fragments and rodent contaminant, percent by mass, (maximum)	1.0
6.	Animal excreta (mg/kg) , (maximum)	1.0
7.	Stalk exceeding 10 mm in length or 2 mm in diameter percent by mass, (maximum)	5.0
8.	Total Ash, percent by mass on dry basis, (maximum)	12.0
9.	Acid-insoluble ash, percent by mass on dry basis, (maximum)	3.5
10.	Volatile oil content, ml/100g, on dry basis (minimum)	1.0
11.	Uric Acid , mg/kg on dry basis (maximum)	100

Explanations.- For the purpose of this regulation,-

(i) **Extraneous vegetable matter.-** Vegetative matter associated with the plant from which the product originates - but is not accepted as part of the final product.

(ii) **Foreign matter.-** Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal etc.

(iii) **Stalk.-** The proportion of stalks which have dimensions exceeding 10 mm in length or 2 mm in diameter.]

⁷⁵[**2.9.41 DRIED SAGE.** - (1) Dried sage in form of whole or cut leaves means

the leaves of the species *Salvia officinalis* L., belonging to the family Lamiaceae, collected before flowering then dried. Dried sage shall have a typical, strong and aromatic odour. It shall have characteristic flavour which is very aromatic, pleasant, fresh and slightly bitter.

(2) Dried sage as whole or cut leaves shall be free from living insects, and shall be free from moulds, dead insects, insect fragments and rodent contamination visible to the naked eye.

(3) It shall conform to the following requirements, namely:-

Sr.No.	Requirements	Limit
(1)	Moisture content, percent by mass (<i>Maximum</i>)	12.0
(2)	Total Ash, percent by mass on dry basis, (<i>Maximum</i>)	12.0
(3)	Acid-insoluble ash, percent by mass on dry basis, (<i>Maximum</i>)	2.0
(4)	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	1.5
(5)	Extraneous matter, percent m/m, (<i>Maximum</i>)	1.0
(6)	Broken stalk/stem, percent m/m, (<i>Maximum</i>)	3.0
(7)	Brown leaves, percent m/m, (<i>Maximum</i>)	5.0

Explanations: for the purpose of this clause,

- a) **Extraneous vegetable matter:** Vegetative matter associated with the plant from which the product originates - but is not accepted as part of the final product.
- b) **Foreign matter:** Any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant; such as sticks, stones, burlap bagging, metal etc”.
- c) **Stalk:** The proportion of stalks which have dimensions exceeding 10 mm in length or 2 mm in diameter

(4) The product shall be labelled in accordance with the Food Safety and Standards (Labelling and Display) Regulation, 2020. In addition, the styles of the product shall also be mentioned on the label.]

⁷⁷[2.9.42 Dried Sweet Basil Leaves:

1. Dried sweet basil leaves are obtained from the species *Ocimum basilicum* L., belonging to the family Lamiaceae. Dried sweet basil leaves shall have characteristic colour, odour and flavour. It shall be free from visible moulds, living/dead insects, insect fragments and rodent contamination. The product shall be free from foreign odours, flavours, any other harmful substances and added colouring matters. It shall conform to the following requirements:

Sr.No.	Requirements	Limit
1.	Moisture content, per cent by mass (<i>Maximum</i>)	12.0
2.	Total Ash, per cent by mass on dry basis, (<i>Maximum</i>)	16.0
3.	Acid-insoluble ash, per cent by mass on dry basis, (<i>Maximum</i>)	2.0
4.	Volatile oil content, ml/100g, on dry basis (<i>Minimum</i>)	0.3
5.	Foreign matter, per cent m/m, (<i>Maximum</i>)	1.0
6.	Extraneous vegetable matter, per cent m/m, (<i>Maximum</i>)	3.0
7.	Yellow or Brown leaves, per cent m/m, (<i>Maximum</i>)	5.0]

2. **Explanations:** for the purpose of this clause: -

- (1) **Foreign matter:** Any visible objectionable matter or material not usually associated with the natural components of the spice plant such as sticks, stones, burlap bagging, metal etc.
- (2) **Extraneous vegetable matter:** Vegetative matter associated with the plant from which the product originates, but is not accepted as part of the final product.]

⁸²[2.9.43 **Dried Sweet Marjoram.** - (1) Dried sweet marjoram leaves are obtained from the species *Origanum majorana* L (Syn. *Majorana hortensis*) belonging to the family Lamiaceae.

(2) The Stems are of square section, erect and branching and the leaves are 2 mm to 5 mm in length and green to greyish in colour depending on the origin of the plant.

(3) The leaves are opposite, oblong, ovate, blunt and hairy on both surfaces.

(4) The purplish or white flowers have spoon-shaped bracts and are gathered as oblong spikelets in clusters on the ends of the stalks.

(5) The product shall have characteristic colour, odour and flavour and shall be free from visible moulds, living or dead insects, insect fragments and rodent contamination.

(6) The product shall be free from foreign odours, flavours and any other harmful substances and added colouring matters.

(7) It can be presented in following styles, namely: -

(i) Bouquets: consist only of the whole dry plant without the root.

(ii) Rubbed marjoram: consists of only dry leaves and flowers.

(8) It shall conform to the following requirements, namely:-

S. No.	Requirements	Bouquets	Rubbed
(1)	(2)	(3)	(4)
1.	Moisture content, per cent by mass (<i>Maximum</i>)	12.0	12.0
2.	Total Ash, per cent by mass on dry basis, (<i>Maximum</i>)	16.0	16.0
3.	Acid-insoluble ash, per cent by mass on dry basis, (<i>Maximum</i>)	4.5	4.5
4.	Volatile oil content, ml/100 g, on dry basis (<i>Minimum</i>)	0.3	0.7
5.	Foreign matter, per cent m/m, (<i>Maximum</i>)	3.0	1.0

6.	Extraneous vegetable matter, per cent m/m, (Maximum)	--	1.0
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Explanation - For the purposes of this clause, -

(i) “extraneous vegetable matter” means vegetative matter associated with the plant from which the product originates, but is not accepted as part of the final product; and

(ii) “foreign matter” means any visible objectionable foreign detectable matter or material not usually associated with the natural components of the spice plant, such as, sticks, stones, burlap bagging, metal etc.]