

Standard Specification for Iranian Raisins

SCOPE

This standard applies to dried grapes of varieties conforming to the characteristics of *Vitis vinifera* L. which have been suitably treated or processed and which are offered for direct consumption as raisins or sultanas. It also covers raisins packed in bulk containers which are intended for repacking into consumer size containers.

Product Definition

Raisins is the product prepared from the sound dried grapes of the varieties conforming to the characteristics of *Vitis vinifera* L. processed in an appropriate manner into a form of marketable raisin with or without coating with suitable optional ingredients.

The dried grapes or raisins:

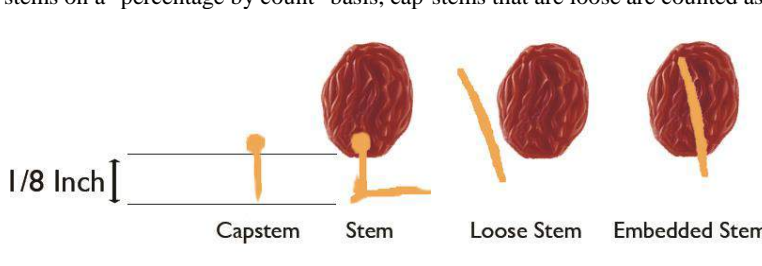
- shall be properly cleaned, whether washed or unwashed;
- shall be stemmed except for the form of cluster raisins;
- may be dipped (unbleached) in an alkaline lye and oil solution as an aid to drying;
- may be bleached by being subjected to bleach treatment by chemical means and are further processed by drying;
- shall be reduced in moisture to a level that will assure preservation of the product;

Definitions of Defects

(a) **Piece of stem** - Portion of the branch or main stem could be embedded to the berries or loose.

(b) **Cap-stem** - Small woody stem exceeding 3 mm or 1/8 inch in length which attaches the grape to the branch of the bunch and whether or not attached to a raisin.

(In considering allowances for cap-stems on a "percentage by count" basis, cap-stems that are loose are counted as being on a raisin).



(c) **Immature or Undeveloped Raisins** - Refers to raisins that:

1. Are extremely light-weight berries, lacking in sugary tissue indicating incomplete development;
2. Are completely shriveled with practically no flesh, and
3. May be hard.

(d) **Damaged Raisins** - Raisins affected by sunburn, scars, mechanical injury, or other similar means which seriously affect the appearance, edibility, keeping quality, or shipping quality. In "Seedless" type, normal mechanical injury resulting from removal of cap-stems is not considered "damage".

(e) **Sugared Raisins** - Raisins with external or internal sugar crystals which are readily apparent and seriously affect the appearance of the raisin. Raisins that are sugar-coated or to which sugar is added intentionally are not considered "sugared raisins".

(f) **Seeds** - Substantially whole, fully developed seeds which have not been successfully removed during processing of seeded forms.

(g) **Moisture** - Moisture means the percentage by weight of the processed raisins, exclusive of branch and heavy stem material, which is moisture when determined by the Dried Fruit Moisture Tester Method or in accordance with other methods that give equivalent results.

TYPE

Seedless	Sultana Raisins	Seed-Bearing	Sultana Raisins
	Sun-Dried Raisins		Sun-Dried Raisins
	Golden Raisins		Green Raisins
	Green Raisins		Golden Raisins (Sulphur Dioxide treated/ Bleached)
			Maviz Raisins

COLOR REFERENCE

Amber	Light □ SO2 Free □ SO2 Max.1000PPM
	Amber
	Dark Amber
Brown	Light Brown
	Brown
	Dark Brown
Golden: Golden raisins are reasonably uniform in color and may range from yellow or golden or greenish yellow to light amber wherein the predominating color may be greenish yellow or light amber and that not more than three percent, by weight, of all the raisins may be definitely dark berries.	
Green: Green raisins are reasonably uniform in color and may range from green or light green to yellow and amber yellow wherein the predominating color may be green or yellowish green that not more than three percent, by weight, of all the raisins may be definitely dark berries.	

- As the natural characteristic of the fruit, the color of Raisins will get darker towards the end of the crop year.

SIZE Count Per 100g

Jumbo	< 300	<i>Sultanas – Sundried Raisins – Golden Raisins- Green Raisins- Maviz Raisins</i>
Standard	300 - 370	<i>Sultanas – Sundried Raisins – Golden Raisins</i>
Medium	370 - 500	<i>Sultanas – Sundried Raisins– Golden Raisins</i>
Small	500 - 650	<i>Sultanas – Sundried Raisins</i>

- Minimum 80% of the berries are uniform in size (homogenized).

QUALITY CLASS GRADING

Recommended facilities & processing for production:

RTU ISO 9001 & HACCP / ISO 22000 Approved	Grade AAA	Double or Triple Washed – Laser Sorted – X-Ray Scanned – Handpicked - Optional Selection on Belt
	Grade AA	Double or Triple Washed – Laser Sorted – X-Ray Scanned or Handpicked – Optional Selection on Belt
	Grade A	Double Washed – Handpicked or Laser Sorted – Selection on the belt (QC report accompanied)
	Grade B	Once or Double Washed – Selection on belt

ORGANOLEPTICAL REQUIREMENTS

<u>Criteria</u>	<u>Statement</u>
Appearance	Composed of berries with the general appearance of the representative type
Color	As per Color table on this specification sheet.
Smell	Typical sultana aroma without any foreign smell or off- odor
Taste	Typical raisins taste without any foreign taste
Consistency	Firm, not sticky, free-flowing

<u>Physical Properties</u>	TARGET	RTU Grade		Grade A	Grade B	
		AAA	AA			
Mouldy Berries (g/100g)	0.5	1	1	2	2	
Damaged Berries (g/100g)	2	4	4	5	5	
Undeveloped Berries (g/100g)	0.3	0.5	0.5	1	1	
Sugared Berries (g/100g)	Before March	0.2	1	1	1.5	1.5
	After March	0.2	1.5	1.5	2	2
Stones (mineral Impurities) > 2mm	NIL	NIL	2	10	15	
Sand & Grit (Piece/MT)	NIL	1	2	2	3	
Capstem (Piece/100g)	Loose	NIL	1	2	3	3
	Embedded	1	2	2	3	3
Stalks (Piece/12.5 kg)	4 – 15 mm	1	1	2	4	6
	Larger than 15 mm	NIL	0	1	2	3
Foreign Matter Such as Plastic, etc.	NIL	0	2	5	10	
Extraneous Vegetable Material (Piece/MT)	NIL	1	2	5	10	
Glass & Hazardous foreign matter	Absent	Absent				

<u>Chemical Properties</u>	Max.	Max.	Max.	Max.
Moisture	16%	16%	16%	16%
Sun-Flower Oil (optional)	5Kg per ton	5Kg per ton	5Kg per ton	5Kg per ton
Ochratoxin	10 ppb	10 ppb	10 ppb	10 ppb
Sulphur Dioxide (Only applies to Bleached)	<2000ppm	<2000ppm	<2000ppm	<2000ppm

L.O.D. (Limit of Detection): B1=1 p.p.b.; B1+B2+G1+G2= 2 p.p.b.

Results	Total (B1+B2+G1+G2)PPB	B1 (PPB)
Sample 1	Nd	Nd
Sample 2	Nd	Nd
Sample 3	Nd	Nd

Microbiological Properties

<u>Parameters</u>	<u>Target</u>	<u>Method</u>
Total Viable Count	10.000/g CFU	ISO 4833
Yeast & Mould Count	1000/g CFU	ISO 7954
Coliform	100/g CFU	ISO 4832
E-coli	ABSENT	ISO 4832
Salmonella	ABSENT per 25g	TS 3446

FUMIGATION

Container is fumigated immediately prior to shipment with the following fumigant agents:

PH3	PH3, 2 grams per cubic meter at a temperature of 24°C, for 5 days
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METAL DETECTION

Goods are metal detected after being packed inside cartons. Minimum required sensitivity:

Parameters	Minimum detection size (Sphere size)	
Ferrous	2.5 mm	
Non-Ferrous	Cu: 3mm	Al: 3.5mm
Stainless Steel	3 mm	

PACKAGING

- The cardboard should be clean and strong suitable for the packaging of goods.
- The polyethylene bags should be food-grade and shouldn't be dirty and torn.
- The products are packed in cardboard boxes with inner polyethylene plastic bag, in blue or other non-transparent color.
- Cartons are clearly Marked according to Iranian Standard requirements and customer's requirements
- Packaging options other than 12.5 Kg boxes are available.

Shelf life & Storage Instructions

Production date +1 year

Under cool and dry storage, store away from sources of strong odors or which may breed insect. Rotate stocks by using oldest first.

Nutritional Information

Typical Value	Per 100 gram	Typical Value	Per 100 gram
Energy	290 Kcal	Potassium	710 mg
Protein	2.8 g	Magnesium	41 mg
Carbohydrate	67 g	Calcium	67 mg
Fat	0.45 g	Iron	3.1 mg
Vitamin A	500 mg	Phosphorus	135 mg
Vitamin B1	0.2 mg	Sulphur	16 mg
Vitamin B2	0.08 mg	Fiber	2 g
Nicotilamid	0.5 mg	Potassium	710 mg
Sodium	30 mg	Magnesium	41 mg

GENETICALLY MODIFIED ORGANISMS:

No genetically modified organisms are permitted.

ALLERGENS:

No Allergen. As described in EU Regulation no:89/2003