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## China - Peoples Republic of

**Post:** Beijing

### National Food Safety Standard on Roasted Seeds and Nuts

**Report Categories:**

Food and Agricultural Import Regulations and  
Standards - Certification

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**Report Highlights:**

On June 4, 2012, China notified the WTO of National Food Safety Standard: Roasted Seeds and Nuts as SPS/N/CHN/523. This standard applies to raw and cooked nuts and seeds. This standard prescribes the terms, definitions, and technical requirements etc. The date for submission of final comments to China is August 3, 2012. The proposed date of entry is to be determined. This report is an INFORMAL translation of this document. Comments can be sent to China's SPS Enquiry Point at [sps@aqsiq.gov.cn](mailto:sps@aqsiq.gov.cn)

**General Information:**  
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**BEGIN TRANSLATION**

**National Standard of the People's Republic of China**

**Foreword**

This standard shall supersede GB 19300-2003 of the “Sanitary Standard of Roasted Foods” and GB 16326-2005 “Sanitary Standards of Roasted Seeds and Nuts.”

Compared with GB 19300-2003 and GB 16326-2005, main changes include:

- Name of the standards are changed;
- Scopes are changed;
- Terminologies and definitions are added;
- Sense requirements are amended;
- Physicochemical indexes are amended;
- GB 2762 and GB 2761 are quoted directly for the limits to pollutants and limits to fungal toxin;
- Limits to pesticide residue are added;
- Limits to microbes are amended;
- Annex A is added.

GB 19300-XXXX

**National Standard of Food Safety**  
**Roasted Seeds and Nuts**

1. Scope

This standard shall be applicable to roasted seeds and nuts.

1. Terminology and definitions

1. Roasted seeds and nuts shall mean dry and boiled foods with fruit and vegetable seeds and nuts as the main raw materials, with or without accessories, made through drying, stir-frying, roasting, deep-frying or other processing techniques.
2. Fruit and vegetable seeds shall mean the seeds of melons, fruits and vegetables, including sunflower seeds, watermelon seeds, pumpkin seeds, peanuts, peas and string beans.
3. Nuts shall mean the tree plant seeds with strong shells, including walnut seeds, Chinese chestnuts, almond, semen amygdalae, kiskatom, pistachio nuts, Chinese torreya, Macadamia and pine nuts.
4. Initial processing shall be the process under which the nuts and fruit and vegetable seeds are processed after cleaning, screening, shelling or grill under low temperature.
5. Moldy kernel shall mean the kernels of the nucleus with abnormal color and luster and fungus on the surface or with peculiar smell.
6. Health nuts and seeds shall mean the nuts, fruit and vegetable seeds or nucleuses after initial processing like drying without undergoing cropping techniques.
7. Ripe nuts and seeds shall mean foods with fruit and vegetable seeds, nuts or their nucleuses as the raw materials, with or without accessories made through cropping techniques like drying, deep-frying, boiling or microwaving.

2. Technical requirements

1. Requirements for raw materials: The raw materials for cropped nuts and seeds shall comply with the provisions dry nuts and seeds and other applicable standards and regulations.
2. Sense requirement
  1. The sense requirements for health nuts and seeds shall comply with the provisions under Table 1.

GB 19300-XXXX

Table 1  
Sense Requirements for Health Nuts and Seeds

Item	Requirements	Testing methods
Color and luster	Even color and luster with normal color and luster of this product	Take samples for appropriate amount. Place the samples on a clean white porcelain cup and observe the color and luster, shape of the particles and alien matters. Smell and make comments. Moldy kernels shall be counted in single digits and the products with shells shall be inspected with the shells removed.
Taste and smell	Pure taste and smell without peculiar odor like sour	
Moldy kernels	≤2% for products with shells and no moldy kernel shall be observed for products without shells	
Alien matters	No alien matters shall be observed with normal visual observation	
<p>How to calculate moldy kernels:</p> <p>Take samples according to sample quartering (about 200 kernels), count their number and remove any shells. Count the moldy kernels and calculate the index of moldy kernels according to the following formula:</p> $F = \frac{n_1}{n} \times 100\%$		

Wherein:

f—the index of moldy kernels of the product with the unit of kernel per 100 (%);

ni—number of moldy kernels;

n—total number of the sample taken

1. The sense of the cropped nuts and seeds shall comply with the requirements under table 2

Table 2  
Sense Requirements for Cropped Nuts and Seeds

Item	Requirement	Testing methods
Color and luster	Even color and luster with normal color and luster of this product	Take samples for appropriate amount. Place the samples on a clean white porcelain cup and observe the color and luster, shape of the particles and alien matters. Smell, taste and make comments.
Taste and smell	Pure taste and smell without peculiar odor like sour	
Alien matters	No alien matters shall be observed with normal visual observation	

1. Physicochemical indexes shall comply with the provisions under table 3.

Table 3  
Physicochemical Indexes

Item	Indexes				Testing methods
	Health nuts and seeds		Cropped nuts and seeds		
	Nuts	Fruit and vegetable seeds	Sunflower seeds	Others	
Peroxide value (measured in fat) (g/100g) ≤	0.08	0.4	0.80	0.50	Refer to annex A for pre-processing of the samples and testing is to be done as per GB/T 5009.37
Acid value (measured in fat, KOH)/(mg/g) ≤	3				
Sulfur dioxide contents/(g/kg) ≤	--	--	0.4		GB/T 5009.34

1. Limits to the pollutants and fungal toxin
  1. Limits to pollutants shall comply with the provisions under GB 2762, and the legumes in the fruit and vegetable seeds shall comply with the provisions regarding legumes.
  2. Limits to fungal toxin shall comply with the provisions under GB 2761 and the legumes in the fruit and vegetable seeds shall comply with the provisions regarding legumes.
2. Limits to pesticide residues shall comply with GB 2763 and applicable national regulations and rules.

3. Limits to microbes

1. Limits to microbes shall comply with the provisions under the “National Standard of Food Safety/Limits to Pathogen.
2. Limits to coliform in the ripe nuts and seeds, leaf mold and yeast shall comply with the provisions under table 4.

Table 4  
Limits to Coliform in the Ripe Nuts and Seeds, Leaf Mold and Yeast

Item	Limits (expressed in CFU/g unless otherwise specified)	Testing methods
Coliform groups/(MPN/100g) ≤	30	Counting method under GB 4789.3 MPN
Leaf mold	25	GB 4789.15
Yeast	25	GB 4789.15

Applicable only to foods of cropped nuts and seeds.

1. Food additives

The use of food additives shall comply with the provisions under GB 2760.

GB 19300-XXXX

**Annex A**

Pre-processing methods of acid value and peroxide values

A.1 Shelling

Take appropriate amount of edible parts of nuts and seeds with shells and remove the shells. For the kernels with green internal membranes (like melon basket seeds), the green internal membranes attached shall be removed from the surface of the kernels.

How to remove the green internal membranes: Spray the surfaces of the kernels after the shelling with distilled water. After 5 minutes, scrub off the green internal membranes with hands and place the kernels without the green membranes into an oven at the temperature of about 50°C for 45 minutes.

A.2 Oil extraction

Place the sample after the crushing into a Delta bottle and add 100ml of Sherwood oil of 30°C to 60°C. Shake the bottle for about 1 minute and leave it for 12 hours. Filter the contents through a funnel with anhydrous sodium sulfate at the temperature of 60°C. Shake off the Sherwood oil to remain standby. The amount of oil extracted shall comply with the provisions under GB/T 5009.37.

**END TRANSLATION**

