



U.S. NO. 1 Kernel Hazelnut Product Specification

Description

Raw Hazelnuts Kernels. No additives, fumigants, pesticides or preservatives.	
Color	Brown/reddish colored tint with vanilla colored kernel meat.
Texture	Smooth to touch with soft flaky skin and meats are firm and crunchy.
Kernel Flavor	Clean. Typical of hazelnuts. No musty, rancid, bitter or other off flavors or odors.

Declarations

This product is GMO-free and is certified Kosher.	
This product does not contain artificial additives or preservatives.	
This product is intended for pasteurization or roasting only. It is not intended for raw consumption.	

Allergen Information

After risk assessment, hazelnuts are the only allergen identified as present in the product.

Origin

Oregon, USA

Labeling, Shelf Life and Packaging

Labeling	Cases marked with Willamette's name, product and lot code.
Shelf Life	12 Months at 31-41 degrees Fahrenheit. Do not store near odor producing substances.
Packaging	One-ton polymers supersacks / 1000 Kg. / 2204.6 lbs.
Product Size	Whole (-11mm) & Broken (Unsize)

Physical and Chemical Limits (Based on USDA)

Taste and Flavor	Typical nutty for hazelnuts, no batch-to batch variation.
Appearance	It usually is brown with stripes lined toward the pointed end.
Texture	Hard to break between the teeth. Firm, crunchy. No soft nuts, which are squeezable between the fingers.
Total of Rotten, Moldy, Worm Eaten, Sour and Bad Taste	1%
Worm (Inshell)	3%
Worm (Kernel)	1%
Moldy, Rancidity, Decay or Insect Injury	1%
Foreign Material	0.02% maximum
Discolored / Dark	0%
Moisture Content	6% maximum
Free Fatty Acids on Hazelnut Oil	≤1.5%
Fat Content	65%
Peroxide value	≤10 Meq O ₂ /Kg
Peanuts	0 ppm
Total aflatoxins	≤15 ppb
Aflatoxins B1	≤5 ppb



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Microbiological Requirements

Total Plate Count	≤10,000 CFU/g
Yeast & Mold	≤1,000 CFU/g
Enterobacteriaceae	≤100 CFU/g
Coliforms	≤100 CFU/g
E. coli O157:H7	Negative
E. Coli	≤10 CFU/g
Salmonella spp.	Negative
Listeria spp.	Negative
Staphylococcus a.	≤20 CFU/g

Nutritional Information

Average Humidity	5 g/100g
Oil Content	67 g/100g
Oleic	78%
Linoleic	10%
Palmitic	5%
Stearic	4%
Total Protein	17 g/100g
Insoluble Fiber	13 g/100g
Soluble Fiber	4 g/100g
Crude Phenolic Extract	7 g/100g

Kernel Nutrition Information

See USDA National Nutrient Database for Standard Reference