

IQF BROCOLI FLORETS 40/60 mm // 1 1/2" to 2 1/3"

PRODUCT DESCRIPTION

NOVA Alimentos Frozen IQF Broccoli Florets 40/60 (aprox. 1 ½ to 2 1/3 inches) are made of young fresh clean and healthy florets from the Broccoli plant belonging to the species *Brassica oleracea Avenger* & *Brassica oleracea Domador*.

NOVA Broccoli is inspected, classified, Hand-Cut, washed, blanched, IQF (Individually Quick Freezing) and packed under the highest quality controls, to achieve a great color and good flavor on final product to commercialize and export from Ecuador throughout the world.



PROCESS DESCRIPTION

- ☐ Our Process starts with the arrival of the raw material from the fields to the facility, where product's quality is inspected under our protocol. A reception guide is generated for each truck entering with raw supply the facility. Last 4 digits of reception guide correspond to the first numbers of our lot allocation, ensuring traceability directly from the field and throughout processing. Once quality is approved, raw supply is accepted and stored in a refrigerated storage room (Fresh Camara) at 6°C ± 2°C (42°F ± 35°F) or taken to hand-cutting stage.
- ☐ The raw material is distributed throughout our cutting tables, where product is Hand-Cut by our personnel following NOVA quality standards and protocol.
- ☐ The Hand-Cut florets leave the cutting station and are classified to size by classifier sieve machine which classifies based on diameter.
- ☐ Once product is classified and identified by floret size, it goes through the inspection band where a quality control team does a visual quality inspection selecting florets and eliminating florets that don't follow NOVA spec before product goes into processing stage.
- ☐ The next step is entering the Processing Line, it starts with the washing of the produce in 2 vats of water with -3ppm of chlorine, with showers and air bombs which generate agitation to remove any possible material which could have been present at the fields.
- ☐

- ☐ Washing continues with top showers with focused spray to help remove any material stuck inside florets.
- ☐ After washing, the product goes through blancher, blanching at 88-92 °C (190-198 °F) at a retention timing according to client request to have reduced blanching. Blanching timing has been determined at a reduced blanching with higher HZ velocity and reduced timing while maintaining product safety and decreasing enzymes activity (Peroxidase timing).
- After blanching, product goes through pre-cooling showers with water temperature of 14-18 °C (57 - 64°F). Product is ready for Hydrocooler; product is immersed in cold water at 3-5°C (37-41°F) and 15-30 ppm of Tsunami 100, decreasing the temperature right before freezing stage.
 - ☐ Product goes through two fans to eliminate any water excess before entering IQF.
 - ☐ During individual quick freezing IQF step Broccoli is frozen in IQF tunnel at a temperature of -18 to -30 °C (-0.4 to -22°F) and then -14 to -18 °C (6.8 to -0.4°F)
 - ☐ Processed Frozen Product is stored in the freezing storage room at a temperature of -18 °C +/-2° (-0.4 °F), until its packaged.
 - ☐ Product is classified according to floret size, client specifications and diameter. Before proceeding to packaging, product is inspected in a band by quality control team; any floret with defects, size unconformity or foreign material is removed. Product is packed 1x10 Kg boxes (1x22.0462 pounds), 1x500 Kg Totes (1102.31 pounds.). Product goes through metal detectors before leaving packaging room
 - ☐ Once product is packaged it is stored in the Finished Freezing Room until it's ready for shipment. Once Container arrives, product is loaded, under constant inspection. Product leaves the facility in a container able to maintain the shipping temperature until arrival to client destination with the proper seals and documentation.
 - ☐ All our products follow the highest Quality Control standards, as well as Ecuadorian and International Product Standards. NOVA product is below USA pesticide regulations.

INGREDIENT STATEMENT

Our Product's composition is 100% Broccoli, blanched and frozen IQF without the addition of any preservatives nor artificial components or additional ingredients.

ALLERGEN DECLARATION

Our Product is free of allergens in it's composition as well as all the packaging materials used in it's packaging. Facility does not use or process allergen products. NOVA Alimentos is a facility which only processes vegetables.

PRESENTATION PACKING

PRESENTATION	NET WEIGHT (lb)	PACK SIZE long- width- high (inch)
TOTES	1102,31	48" x 40" x 42"
BOXES	22,046	14,56" x 10,12" x 9,92"

PHYSICAL ATTRIBUTES

ATTRIBUTES	DESCRIPTION
Flavor	Characteristic
Color	Characteristic
Odor	Characteristic
Texture	Characteristic

CHEMICAL ATTRIBUTES

PARAMETERS	UNIT	SPECIFICATION
pH	-	6.8
Humidity	%	87.5
Fat	%	0.76
Ash	%	0.70
Nitrates	mg/Kg	51.52
Nitrites	mg/Kg	<0.60

MICRO SPECIFICATIONS

PARAMETERS	UNIT	SPECIFICATION
Total Plate Count	CFU/g	100,000
Coliforms	CFU/g	<100
E. Coli	CFU/g	<3
Staphylococcus aureus	CFU/g	<10
Molds and Yeasts	CFU/g	10000
Salmonella	CFU/25g	Absent
Listeria Monocytogenes	CFU/25g	Absent

DESCRIPTION SPECIFICATIONS

DESCRIPTION	SPECIFICATION (w/w)
Whole Florets	>95%
Diameter > 60 mm	10%
Diameter < 40 mm	10%
Length > 60 mm	15%
Length < 40 mm	10%
Major Blemish > 6 mm	5%
Minor Blemish	10%
Mechanical Damage	10%
Not straight cut in base	15%
Yellow florets	5%
Sun Burn	5%
Minor Oxidation	5 Units
Immature (lemon green)	3%
Flowering / non compact	10%
Crumble	5%
Non Vegetable Foreign Material	None
Vegetable Foreign Material	3 Units
Insects	2 units
Christmas tree	5%

STORAGE INSTRUCTIONS & TEMPERATURE

Product has to be stored in a freezer room regulated at a temperature of -18°C (-0.4°F) or below

An adequate storage product rotation system has to be implemented, the principle of "first to enter, first to leave" must be applied.

Storage areas have to apply BPM program, including a plague control program and a maintenance program as well as have an individual energy generation system in place, in case of energy shortages or emergencies.

LOT CODE EXPLANATION

Number of Reception Guide allocated to Raw Supply				Processing Line	Packaging Line
1	2	3	4	5	6

RAW SUPPLY ENTRANCE GUIDE NUMBER (4 digits, last 4 numbers of guide number)	1: Production Line #1	0: Production Line
	2: Production Line #2	1: Packaging Line #1
		2: Packaging Line #2

GMO STATEMENT

NOVA ALIMENTOS S.A. We state our products are free of any GMO genetically modified organisms.

NUTRITIONAL INFORMATION OR NUTRITIONAL PANEL - PER 100g

Nutritional Information	
Portion Size: 100 g	
Portions per package: 5	
Amount of portion: 500 gr.	
Energy 165.25 kj (calories 39,44 Cal)	
% Valor Diario	
Fat Total 1 g	1%
Saturated fatty acids 0g	0%
Trans fatty acids 0g	0%
Monounsaturated fatty Acids 0g	0%
Acids polyunsaturated 0g	0%
Cholesterol 0g	0%
Sodium 901.99 mg	12,87%
Carbohydrates Total	5.05 %
Dietary Fiber	2,89 %
Sugars total 0g	0%
VITAMIN B1 0,05 mg/100	0%
VITAMIN B2 0,05 mg/100	0%
VITAMIN B3 0,82 mg/100	0%
VITAMIN C 1,17 mg/100	0%

Ether Extract	0,16%
Calcium 1167,96 mg/Kg	16.7%
Iron 7,8 mg/kg	0.11%
Phosphorus 63.68 mg/100 g 0.9%	
Humidity	87,5 %
Protein	3,1 %
*Product is free of allergens	