

Byfrost Byfrost S.C. Ul. Jezuicka 7/2 85-102 Bydgoszcz Poland	Quality Specification		No. of Specification:	SP 58
			Edition:	2
	Broccoli florets 20-40mm, IQF, Class B		Date of edition:	29.04.2021
			Page:	1 z 2
Complied by: Quality Control Specialist - Maja Bujak		Approved by: Plant Manager - Mirosław Żytowiecki		
Data: 29.04.2021	Podpis: <i>Maja Bujak</i>	Data: 29.04.2021	Podpis: <i>Mirosław Żytowiecki</i>	

1. The name of the product	Broccoli florets 20-40mm, IQF, Class B		
2. Latin name	<i>Brassica oleracea var. italica</i>		
3. Product description	Product received from healthy, mature material, blanched or cooked and deeply frozen in loose way, glazed.		
	Production period: September-November		
4. Country of origin	Poland		
5. Sensory requirements			
5.1 Ingredients	100% broccoli		
5.2 Organoleptical requirements	size	florets 20-40mm	
	colour	green, characteristic for change, bright borders of florets are not a defect	
	aroma	typical, without strange aromas	
	taste	typical, without strange aftertaste	
	texture	firm, tender, not fibrous	
6. Physicochemical requirements			
6.1. Pesticide residues	Product remains in accordance to Directive (EC) no. 396/2005 of the European Parliament and of the Council of 23 February 2005. As: 91/414/EEC, as latter changes.		
6.2. Content of heavy metals harmful to health	According to Commission Regulation (EC) No. 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.		
6.3. Chemical requirements	Peroxidase - negative		
6.4. Physical requirements	Sample 1000g / 40 florets		
7. Tolerances			
Defect	Defect description	Tolerances	Unit
Assessed on 1000g sample - frozen			
Clumps	These are two or more florets welded together by freezing, which cannot be readily separated without damaging the florets, or where a number of broken pieces or dust are fused together to give a clump heavier than 25g.	2	psc./kg
Fragments and Dust	Any pieces of floret or unattached stalk or core, less than 15mm in the largest dimension, or leaf or leaf pieces less than 25mm in the largest dimension.	2	% weights
Undersize	Florets below declared size but above 15mm, measurement of the round holes.	20	% weights
Stalk/Core	This includes any unattached pieces of stalk/core equal to, or greater than 15mm in the largest dimension, and on which there are no buds.	4	% weights
Foreign Matter (FM)	This includes any material not derived from the broccoli plant nor defined as FEVM. Exampels of foreign matter include insects, pieces of insects, wood, glass, mineral stones, metal, snails, slugs, toxic berries etc.	0	psc./kg
Foreign Extraneous Vegetable Matter (FEVM)	This includes any vegetable matter not derived from the broccoli plant, and which is non-toxic.	0	psc./kg
Extraneous Vegetable Material (EVM)	This includes any material derived from the broccoli plant, other than the broccoli florets or stalk; this includes leaf or pieces equal to, or greater than 25mm in any dimension.	1	psc./kg
Assessed on 40 florets sub-sample - frozen			
Oversize			
Floret Lenght (all products)	This includes florets which are more than 1,5 times the maximum declared floret dimension, measured from the dome of the head to the base of the stalk (20-40mm floret dimension would have a maximum tolerance of 60mm).	6	psc.
Floret Head (size graded product only)	Florets above declared size, measurement of the round holes.	7	psc.



Byfrost Byfrost S.C. Ul. Jezuitcka 7/2 85-102 Bydgoszcz Poland	Specyfikacja jakościowa	Numer specyfikacji	SP 58
		Wydanie	2
	Brokuł 20-40mm, GŁĘBOKO MROŻONY, Klasa B	Data wydania	29.04.2021
		Strona	2 z 2
Różyczki przejrzale o zmienionej barwie	Różyczki ze ściśniętymi pączkami o zmienionej barwie z powodu przegrzania- barwa khaki, żółta bądź brązowa.	1	szt.
Różyczki z utlenionym głąbikiem	Różyczki z utlenionym głąbikiem w miejscu cięcia mocno wpływające na wygląd róży.	8	szt.
Większe plamy	Zalicza się tu plamy, których powierzchnia jest większa niż 6mm lub pojedyncze plamy, których suma daje tę powierzchnię. Wyklucza się starzejące pąki.	2	szt.
Ogólna liczba plam (większe i mniejsze plamy)	Suma plam większych i mniejszych. Mniejsze plamy, których powierzchnia jest między 2-6mm bądź suma plam daje ten wynik. Przebarwienia mniejsze niż 2mm są ignorowane. Nie zalicza się tu starzejących paków.	10	szt.
Różyczki źle przycięte	*to takie różyczki, przy których pozostał jeden liść lub jego część dłuższa niż 25mm; *różyczki, których podstawa nie została wyraźnie odcięta i ma 'skaleczenie' większe niż 5mm długości; *gdy różyczka została poważnie uszkodzona podczas różyczkowania, do tego stopnia, że	5	szt.

8. Wartości odżywcze			
	Energia	34 kcal	
	Tłuszcz	0,37 g	
	Białka	2,82 g	
	Nasycone kwasy tłuszczowe	0,114 g	
	Węglowodany	6,64 g	
	Cukry	1,7 g	
	Błonnik	2,6 g	

8. Wymagania mikrobiologiczne			
Zgodnie z Rozporządzeniem Komisji (WE) nr 1441/2007r. Zmieniające rozporządzenie (WE) nr 2073/2005 w sprawie kryteriów mikrobiologicznych dotyczących środków spożywczych			
	Rodzaj bakterii	Tolerancje jtk/ 1g	
	<i>Listeria monocytogenes</i>	<=100	
	<i>E.coli</i>	<=100	

9. Wymagania specjalnie	
9.1. GMO	Produkt nie zawiera, nie składa się i nie został wyprodukowany z organizmów genetycznie modyfikowanych zgodnie z Rozporządzeniem WE 1829/2003 oraz 1830/2003 wraz z późniejszymi zmianami
9.2. Alergeny	Produkt nie zawiera alergenów zgodnie z Rozporządzeniem Parlamentu Europejskiego i Rady (UE) nr 1169/2011 z dnia 25 października 2011 w sprawie przekazywania konsumentom informacji na temat żywności
9.3. Jonizacja radiacyjna	Produkt nie został poddany jonizacji radiacyjnej
10. Znakowanie	Produkt oznakowany etykietą zawierającą informacje: nazwa, numer partii, waga netto, data produkcji, data ważności, kraj pochodzenia, rok zbiorów, temperatura przechowywania
11. Dostępne opakowania	worki a'20 kg, kartony a'10kg lub opakowania detaliczne, cateringowe
12. Przeznaczenie konsumencie	Produkt przeznaczony do konsumpcji po uprzedniej obróbce termicznej lub jako półprodukt do produkcji przetworów spożywczych dla wszystkich grup ludności.
13. Dystrybucja	Towar należy przewozić środkami transportu wyposażonymi w urządzenia zapewniające utrzymanie w każdym miejscu produktu temperatury nie wyższej niż - 18°C. Dopuszcza się krótkotrwały wzrost temperatury, nie więcej niż o 3°C, podczas czynności manipulacyjnych, załadunki i rozładunki. Środki transportu muszą spełniać wymagania sanitarne zgodnie z aktualnym rozporządzeniem Ministra Zdrowia w sprawie wymagań sanitarnych dotyczących środków transportu żywności.
14. Przechowywanie	Produkt przechowywać w temperaturze ≤-18°C
15. Okres przydatności do spożycia	24 miesiące od daty produkcji w wyżej wymienionych warunkach przechowywania



Byfrost Byfrost S.C. Ul. Jezuicka 7/2 85-102 Bydgoszcz Poland	Quality Specification		No. of Specification:	SP 61
			Edition:	2
	Broccoli florets 40-60mm, IQF, Class B		Date of edition:	07.05.2021
			Page:	1 z 2
alist - Maja Bujak		Approved by: Plant Manager - Mirosław Żytowiecki		
Data: 07.05.2021	Podpis: 	Data: 10.05.2021	Podpis: 	

1. The name of the product	Broccoli florets 40-60mm, IQF, Class B			
2. Latin name	<i>Brassica oleracea var. italica</i>			
3. Product description	Product received from healthy, mature material, blanched or cooked and deeply frozen in loose way, glazed.			
	Production period: September-November			
4. Country of origin	Poland			
5. Sensory requirements				
5.1 Ingredients	100% broccoli			
5.2 Organoleptical requirements	size	florets 40-60mm		
	colour	green, characteristic for change, bright borders of florets are not a defect		
	aroma	typical, without strange aromas		
	taste	typical, without strange aftertaste		
	texture	firm, tender, not fibrous		
6. Physicochemical requirements				
6.1. Pesticide residues	Product remains in accordance to Directive (EC) no. 396/2005 of the European Parliament and of the Council of 23 February 2005. As: 91/414/EEC, as latter changes.			
6.2. Content of heavy metals harmful to health	According to Commission Regulation (EC) No. 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs.			
6.3. Chemical requirements	Peroxidase - negative			
6.4. Physical requirements	Sample 1000g / 40 florets			
7. Tolerances				
	Defect	Defect description	Tolerances	Unit
	Assessed on 1000g sample - frozen			
	Clumps	These are two or more florets welded together by freezing, which cannot be readily separated without damaging the florets, or where a number of broken pieces or dust are fused together to give a clump heavier than 25g.	2	psc./kg
	Fragments and Dust	Any pieces of floret or unattached stalk or core, less than 15mm in the largest dimension, or leaf or leaf pieces less than 25mm in the largest dimension.	2	% weights
	Undersize	Florets below declared size but above 15mm, measurement of the round holes.	20	% weights
	Stalk/Core	This includes any unattached pieces of stalk/core equal to, or greater than 15mm in the largest dimension, and on which there are no buds.	4	% weights
	Foreign Matter (FM)	This includes any material not derived from the broccoli plant nor defined as FEVM. Exampels of foreign matter include insects, pieces of insects, wood, glass, mineral stones, metal, snails, slugs, toxic berries etc.	0	psc./kg
	Foreign Extraneous Vegetable Matter (FEVM)	This includes any vegetable matter not derived from the broccoli plant, and which is non-toxic.	0	psc./kg
	Extraneous Vegetable Material (EVM)	This includes any material derived from the broccoli plant, other than the broccoli florets or stalk; this includes leaf or pieces equal to, or greater than 25mm in any dimension.	1	psc./kg
	Assessed on 40 florets sub-sample - frozen			
	Oversize			
	Floret Lenght (all products)	This includes florets which are more than 75mm, measured from the dome of the head to the base of the stalk.	6	psc.
	Floret Head (size graded product only)	Florets above declared size, measurement of the round holes.	7	psc.

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			Page: 2 z 2	
Assessed on 40 florets sub-sample - thawed				
Process Damage	A broccoli floret from which more than a quarter of the buds have been knocked off during freezing and subsequent processing and handling, leaving exposed peduncles. Sometimes referred to as 'Christmas trees'.	6	psc.	
Maturity- florets with yellow buds	An overmature head is one which has one or more buds showing yellow petals. This shall not be confused with paler underparts (lacking chlorophyll), which are acceptable.	4	psc.	
Maturity- florets with opened inflorescence	A loose limp head resulting from elongated and well spreading peduncles.	6	psc.	
Senescent Buds	Senescent buds are tight buds which have changed colour due to overheating, and are khaki-yellow or brown.	1	psc.	
Florets with peroxidized stems	Florets with oxidized stems in place of cut, strongly affecting on the appearance.	8	psc.	
Major Blemishes	This includes florets which are blemished to the extent that the area affected is greather than an equivalent circle 6mm in diameter, either as a single blemish or an aggregate of blemishes.	2	psc.	
Total Blemishes (Major + Minor)	Minor Blemishes- this includes florets which are blemished to the extent that the area affected is equal to an equivalent circle between 2mm and 6mm in diameter, either as a single blemish or an aggregate of blemishes. This excludes senescent buds. Blemishes less than 2mm in diameter shall be ignored.	10	psc.	
Poorly Trimmed	A poorly trimmed floret is one which is affected by any of the following faults: *where is more than one leaf or part of leaf longer than 25mm attached to the floret; *where the base of the floret has not been cleanly cut, and has a ragged heel greater than 5mm in length; *where the floret has been severely damaged during the floretting process, to the extent that an area greater than a quarter of the floret head is missing; not be confused with Process Damage; *where the floret has been split longitudinally, presenting a cut face.	5	psc.	
8. Nutrient values				
	Energy	34 kcal		
	Fat	0,37 g		
	Protein	2,82 g		
	Saturated fatty acids	0,114 g		
	Carbohydrate	6,64 g		
	Sugars	1,7 g		
	Fiber dietary	2,6 g		
9. Microbiological requirements				
	Kind of bacterias	Tolerances cfu/ 1g		
	Mesophilic aerobic bacteria count	1,0x10 ⁹		
	Yeast and mould count	1,0x10 ³		
	<i>Beta-glucuronidase-positive Escherichia coli</i>	<1,0x10 ¹		
	<i>Coliforms</i>	1,0x10 ³		
	<i>Detection of Salmonella pp.</i>	absent in 25 g		
	<i>Listeria monocytogenes count</i>	< 1,0x10 ¹		
10. Special requirements				
10.1. GMO	Product does not contain, consist of and was not produced from genetically modified organisms in accordance with EC Regulations 1829/2003 and 1830/2003, as latter change.			
10.2. Allergens	Product does not contain allergens in accordance with Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers.			
10.3. Ionizing radiation	Product does not subjected to ionizing radiation.			
11. Labelling	Product labeled with the following information: name, lot number, netweight, production date, expiry date, country of origin, crop year, storage temperature.			
12. Packaging	sacks a'20 kg, cartons a'10kg or retail packaging, catering packaging			
13. Customer use	The product intended for consumption after prior heat treatment or as a semi-finished product for production of food preserves for all population groups. Once thawed product must not be re-frozen.			
14. Distribution	The commodity should be transported in means of transport which are equipped with devices ensuring maintenance of temperature not higher than 21 degrees below zero Celsius in each point of the product. Short-lived rise of temperature, not higher than 3 degrees Celsius, during manipulative actions, loading and unloading is acceptable.			
15. Storage	The product should be stored at ≤-18°C.			
16. Shelf life	24 months from production date in the above storage conditions			

