FOOD SAFETY MANAGEMENT SYSTEM



P.2.1 PRODUCT SPECIFICATIONS

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1. GENERAL INFORMATION

NAME OF THE PRODUCT	Poppy Seeds
VARIETY	Papaver somniferum nigrum
COUNTRY OF ORIGIN	Spain
INTENDED USE	This product is sold "business to business" as a bakery ingredient (not intended to be sold directly to final consumers). To reduce the opium alkaloid content before being placed on the market for the final consumer, this product needs to undergo one or several physical treatments such as washing, soaking, grinding, and specially a heat treatment using temperatures above 135°C, but preferably above 200°C (or lower temperature (e.g. 100°C) if this is in combination with the previously mentioned treatments)*. It's responsibility of the food business operator supplying the seeds to the bakery manufacturer or to any other food business operator that places seeds or seeds products on the market for the final consumer to guarantee that these have the appropriate information in order to meet the limits set in the Regulation 2021/2142. After the mentioned treatments or other demonstrated appropriate treatments of alkaloids reduction, its common uses are, among others, toppings and confectionery fillings for baked products. (See 4.5 Alkaloids)
PROCESS	The poppy crop is received and separated using a trommel screen, destoners and gravity tables; then, it is pre-cleaned using the same destoners and gravity tables. Finally, the pre-cleaned seeds are cleaned using vibratory sifters, air flow columns and gravity tables. The result is a 99,90% pure product.

^{*}Commission recommendation 2014/662/EU of September 2014

2. PHYSICAL CHARACTERISTICS

COLOUR	Black/Blue	
TASTE	Typical poppy seed taste. Not rancid.	
APPEARANCE	RANCE Kidney shaped	
SIZE Between 0,88 mm and 1,1 mm		
SPECIFIC WEIGHT	Around 580 kg/m3	
HUMIDITY	≤ 10%	
a _w	0,50 - 0,70	
PURITY ≥ 99,90%		

3. NUTRITIONAL VALUES (typical values per 100 g)

FAT of which saturated polyunsaturated polyunsaturated of which total sugars added sugars PROTEIN SALT SODIUM ASH CALCIUM POTASSIUM OF Which Saturated S.58 g Analysis A2.33 g Analysis A2.33 g Analysis A2.33 g Analysis A2.58 g Analysis A2.60 g Analysis A1.60 g Analysis A1.77 g Analysis A1.77 g Analysis A1.77 g Analysis A1.70 g Analysis	ENERGETIC VALUE	2167/525 kJ/kcal	Calculated
saturated monounsaturated polyunsaturated5.58 g 10.73 g 26.02 gAnalysisCARBOHYDRATES* of which total sugars added sugars2.90 g 1.60 g Og CalculatedCalculatedFIBER PROTEIN22.80 g 21.77 gAnalysisSALT SODIUM ASH CALCIUM POTASSIUM4.02 mg 4.02 mg 1.70 g AnalysisAnalysisPOTASSIUM IRON0.5 g 61 mgAnalysis	FAT	42.33 g	
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PROTEIN 21.77 g Analysis SALT 0.010 g Analysis SODIUM 4.02 mg Analysis ASH 6.93 g Analysis CALCIUM 1.70 g Analysis POTASSIUM 0.5 g Analysis IRON 61 mg Analysis	added sugars	0 g	Calculated
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POTASSIUM0.5 gAnalysisIRON61 mgAnalysis	ASH	6.93 g	Analysis
IRON 61 mg Analysis	CALCIUM	1.70 g	Analysis
	POTASSIUM	0.5 g	Analysis
VITAMIN D < 1 0 ug Analysis	IRON	61 mg	Analysis
τιο μδ	VITAMIN D	< 1.0 μg	Analysis
CHOLESTEROL 0 mg Literature* ²	CHOLESTEROL	0 mg	Literature*2
TRANS FAT 0 mg Literature*2	TRANS FAT	0 mg	Literature*2

^{*}Carbohydrates = Available carbs. "Carbohydrates" do not include fiber. Total carbs = 2.90 + 22.80 = 25.7

*2: USDA FoodData Central

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4. CHEMICAL PARAMETERS

4.1 HEAVY METALS			
Cadmium < 1 mg/kg*			
Lead	< 1 mg/kg		
Mercury	< 0,02 mg/kg (Regulation 396/2005)		
4.2 PESTICIDES			
According to EU regulations (Regulation 396/2005)			
4.3 ALLERGENS			
Free of LeDa (ALBA) list			
4.4 AFLATOXINS			
Aflatoxin B1 < 2 μg/kg			
Aflatoxins (B1, B2, G1, G2)	< 4 μg/kg		
4.5 ALKALOIDS*2			

Alcaliber analyses a sample of each batch. Each lot is composed of one variety of seeds, depending on which this will have a certain distribution of alkaloids. The possible alkaloid contamination in the product is heterogeneous. The batch data is only to orientate and can only represent the expected distribution of the different alkaloids associated with each variety of seeds.

ALCALIBER has available for its customers an analytical report of each lot, information on minimum, maximum and average values of each variety and the technical support to explain on how to interpret this data.

5. MICROBIOLOGICAL PARAMETERS

These are **typical values**. It must be taken into account that these seeds are a raw agricultural product that grows outdoor and it does not receive a thermal processing or any other method of sterilization; no matter the good agricultural practices or the good manufacturing practices, it is difficult to guarantee no contamination on the field from rodents, birds, insects, etc. In any case, the low moisture and low water activity does not support microbiological growth.

MICROBIOLOGICAL STANDARDS		
Total Plate Count	< 10 ⁶ ufc/g	
Yeasts & Molds	< 10 ⁴ ufc/g	
Enterobacteriaceae	< 10 ⁵ ufc/g	
Escherichia coli	< 10 ufc/g	
Salmonella	Absent in 25g	
Listeria	< 10 ucf/g	
Bacillus cereus	< 10 ³ ucf/g	

6. OTHER INFORMATION

- FREE OF INSECTS (FUMIGATED WITH ALUMINIUM/MAGNESIUM PHOSPHIDE)
- PASSED THROUGH A METAL DETECTOR (FOR MORE INFORMATION, ASK FOR SENSITIVITIES)
- NO GMO
- KOSHER CERTIFIED
- SUITABLE FOR VEGETARIANS
- SUITABLE FOR VEGANS

^{*}Commission Regulation (EU) 2021/1323 amending Regulation (EC) 1881/2006 as regards maximum levels of cadmium in certain foodstuffs sets a maximum limit of 1,20 mg/kg of Cadmium in poppy seeds.

^{*2}These poppy seeds come from poppy varieties specifically grown for pharmaceutical purposes. The natural presence of traces of alkaloids (morphine, codeine, thebaine, ...) is unavoidable due to the dust released from the plant during the harvest and storage. Depending on the variety, the distribution of the alkaloids will vary, and levels cannot be guaranteed because of the product heterogeneity. In order to comply with EU Regulation 2021/2142 (only applicable to companies that place products on the European Union market), the specific recipe and the physical treatment/s (washing, soaking, heat treatment, grinding, etc.) must be validated on a case-by-case basis in order to ensure the compliance of the mentioned limits (20 mg/kg of morphine equivalents*3 for poppy seeds place on the market for the final consumer or 1,5 mg/kg of morphine equivalents*3 on bakery products)

^{*3}Morphine equivalents = sum of morphine + (0,2 x codeine)

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SUITABLE FOR COELIAC

7. PACKAGING AND LABELLING

PACKAGING	NET WEIGHT	USUAL PRESENTATION*
	25 kg	8-9 layers pallets
THREE LAYERS PAPER BAGS	50 lb	9 layers pallets
	12,5 kg	-
DIC DACS	1000 kg	With or without pallet
BIG BAGS	500 kg	With or without pallet

^{*}There is always a cardboard layer between the pallet and the packaging; the pallets are wrapped with a plastic wrap.

PAPER BAGS Alphanumeric code length 9 Name of the product: Origin: Net weight: Manufacturer: Best before:



^{*}Usually the label layout (especially in the case of paper bags) is agreed with the client depending on their requirements. The label shall contain, **at least**, the name of the company (either Alcaliber or the customer's name), the lot number and the name of the product.

LOT CODE: COM (commercial) XX (two last digits of the crop year) – YY (correlative number within the crop year)

I.E: COM22-001 (first commercial lot of the crop 2022)

8. STORAGE

- KEEP IN A COOL AND DRY PLACE
- 24 MONTHS OF SHELF LIFE. AFTER THAT, THE PRODUCT IS STILL SAFE AND IT CAN BE CONSUMED; HOWEVER, THE TYPICAL ORGANOLEPTIC PROPERTIES ARE NOT GUARANTEED FROM THAT POINT ON.

Signed:



24/07/2023 Lois Fraiz Ares Quality Assurance Manager