

CERTIFICATE OF ANALYSIS

Nº: 0936-2020

Date: 27-Oct-2020

Product: Beefskin Gelatin
Grade: 200 Bloom 30 Mesh
Lot Nº: FG 9653
Lot Quantity: 5000 kg
Production Date: 01-Oct-2020
Use by Date: 01-Oct-2025
Storage Conditions: This product is stable when stored in cool and dry conditions away from direct sunlight.

Physical-Chem. Tests	UOM	Min.	Max.	Test Result	Method
Bloom (6,67%, 10°C)	grams	190	210	190	GMIA/GME ⁽¹⁾
Viscosity (6,67%, 60°C)	mP	22,0	32,0	26,2	GMIA/GME
Moisture	%	-	12,0	10,5	GMIA/GME
Ash	%	-	2,0	1,5	GMIA/GME
pH (6,67%, 60°C)	N/A	4,7	6,5	5,7	GME
Sulfur Dioxide	ppm	-	10	≤ 10	GME
Hydrogen Peroxide	ppm	-	10	≤ 10	GME
Arsenic*	ppm	-	1	≤ 1	AOAC ⁽²⁾
Copper*	ppm	-	30	≤ 30	AOAC
Chromium*	ppm	-	10	≤ 10	AOAC
Lead*	ppm	-	5	≤ 5	AOAC
Cadmium*	ppm	-	0,5	≤ 0,5	AOAC
Mercury*	ppm	-	0,15	≤ 0,15	AOAC
Zinc*	ppm	-	50	≤ 50	AOAC
Iron*	ppm	-	15	≤ 15	AOAC
Nitrogen*	%	15	-	≥ 15	Kjeldahl
Mesh profile					GMIA
#20 (d>800µm)	%	-	1	0	
#30 (630<d<800µm)	%	-	2	2	
#60 (450<d<630µm)	%	50	70	70	
#70 (224<d<280µm)	%	-	20	17	
#80 (180<d<224µm)	%	-	10	8	
PAN (d<180µm)	%	-	3	3	

Microbiological Tests	UOM	Spec. Limit	Test Result	Method
Total Aerobic Microbial Count	/1g	≤ 1000	≤ 1000	USP ⁽³⁾
E. coli	/10g	Negative	Negative	USP
Anaerobic Sulphite-Reducing Bacteria	/1g	≤ 10	≤ 10	AFNOR ⁽⁴⁾
Salmonella	/25g	Absent	Absent	AFNOR BIO/ AOAC VIDAS/ ISO6579 ⁽⁵⁾

* - Parameters marked with an asterisk are analysed according to a periodic analysis plan

(1) GMIA/ GME - Gelatin Manufacturers Institute of America / Gelatin Manufactures of Europe

(2) AOAC - Association of Official Analytical Chemists

(3) USP - United States Pharmacopeia & National Formulary

(4) AFNOR - Association Francaise de Normalisation

(5) ISO - International Organization for Standardization