

SELEN BİOKİMYA SAN VE TİC LTD STİ

YARIMBURGAZ MH. HALKALI ALTINSEHIR ISTANBUL CD.  
NO:246 KUCUKCEKMECE ISTANBUL TURKEY 34303

Santa Vittoria d'Alba, 17/03/2021

## ANALYSIS CERTIFICATE

**COLLAGEN – HYDROLYZED I'PERFORMANT: ZERO BLOOM - Kg 3510 – Lot N° 210305**

**COLLAGEN TYPE1 FOR HUMAN CONSUMPTION**

**Production date: 06/03/2021 – BBE: 06/03/2026**

Criteria	Specifications	Results	Test Methods
Origin	Calf Skin	Calf Skin	-
Granulation	50 Mesh	97% pass	ASTM Sieves
Protein content (on dry basis)	>91%	94,1%	Kjeldhal
Viscosity 10%	1,5 - 2,5 mPa.s	1,97 mPa.s	GME
pH	5 – 7	6,06	GME
Clarity		8 NTU	Nephelometry (6,67%)
SO <sub>2</sub>	< 10 ppm	4 ppm	GME
Peroxides	0 ppm	0 ppm	GME
Moisture	< 7 %	5,20 %	GME / USP
Ash	< 2 %	0,31 %	GME
As*	<0,2 ppm	Conforms	ICP-MS
Hg*	<0,1 ppm	Conforms	ICP-MS
Pb*	<1 ppm	Conforms	ICP-MS
Cd*	<0,1 ppm	Conforms	ICP-MS
Cr*	<2 ppm	Conforms	ICP-MS
Fe*	<30 ppm	Conforms	ICP-MS
Zn*	<5 ppm	Conforms	ICP-MS
Cu*	<5 ppm	Conforms	ICP-MS
Average molecular weight	1500Da – 2500Da	Conforms	SEC
Total bacteria count	<1000 cfu/g	Conforms	GME
E. coli	Absent	Absent	GME
Clostridium sulphite-reducing	Absent	Absent	GME/ISO 15213:2003
Yeast & Moulds	<100 cfu/g	Conforms	Sabouraud-glucose agar
Coliforms*	Absent	Absent	ISO 4832:2006
Salmonella**	Absent	Absent	GME/ISO 6579:2017

\* Maximum values obtained from regular analysis made during the last 24 months.

\*\* Result obtained from analysis of one day finished product average sample

Parameters that are not expressly mentioned in this certificate of analysis comply with the specifications on the product data sheet.

Quality Control

ITALGELATINE S.p.A.  
Padre BARALE  
