

Expert Opinion

File No: **IU-Z-364**

Date: **25/01/21**

Applicant: Fabrika proteina i ulja BIOPROTEIN d.o.o. Bulevar Nikole Tesle 30a 11080 Zemun Bulevar Nikole Tesle 30a 11080 Zemun

Documents ref.:

Data on sample Samples submitted 15/01/21

Sample and identification number:

IU-Z-00816 Biopro 21 (Low fat fully toasted soft soybean powder);

Type of testing: Food safety

IU-Z-00816 Sensor analysis, Physico chemical analysis, Microbiological analysis upon request, Physico chemical residue /contaminant analysis: pesticides, heavy metals (Hg, As, Pb, Cd), mycotoxins (Aflatoxin and ochratoxin A), GMO and RH

Date of receipt: 15/01/21

Date of start of lab. analysis: 15/01/21

Date of completion of lab. analysis: 25/01/21

On the basis of results of laboratory analysis and expert review it was determined that the above stated sample IU-Z-00816 from the point of controlled parameters IS IN COMPLIANCE WITH the Product Specification, Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin (OJ L 70 16.03.2005. p1) and amendments (Consolidated version of Reg 396/2005), Commission regulation (EC) No 1881/2006 setting maximum levels for certain contaminants in foodstuffs (OJ L 364/5), Commission regulation (EU) No 619/2011 laying down the methods of sampling and analysis for the official control of feed as regards presence of genetically modified material for which an authorisation procedure is pending or the authorisation of which has expired (OJ L 166/9), Regulation (EC) No 1829/2003 on genetically modified food and feed (OJ L 268/1) and Council Regulation (EC) No: 733/2018 of 15 July 2018 and 1048/2009 of 23 October 2009.

NOTE: Determination of mercury, arsenic and ochratoxin content was done at the request of the user

Head of laboratory
Milan Simić PhD, Hygiene Specialist



Report on laboratory analysis

File No: **IU-Z-364**
Date: **25/01/21**

Data received from applicant:

Applicant: **Fabrika proteina i ulja BIOPROTEIN d.o.o.**
Bear Costs: **Fabrika proteina i ulja BIOPROTEIN d.o.o. Bulevar Nikole Tesle 30a 11080 Zemun**
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Date of receipt: 15/01/21

Date of start of lab. analysis: 15/01/21
Date of completion of lab. analysis: 25/01/21

Statements:

This Report refers only to the tested sample.

"Centar za ispitivanje namirnica d.o.o." has responsible over the data in this report, except for the data provided by the customer.

"Centar za ispitivanje namirnica d.o.o." has not responsible for the validity of the results, using the information provided by the customer.

When the "Centar za ispitivanje namirnica d.o.o." is not responsible for the sampling phase, the results are applied to the sample as received.

Measurement uncertainty associated with the result represents the extended measurement uncertainty expressed as a combined standard measurement uncertainty multiplied with the coverage factor $k = 2$, for a confidence level of 95%.

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No: **IU-Z-364**
Date: 25/01/21

Analysis results:

Sample: IU-Z-00816 Biopro 21 (Low fat fully toasted soft soybean powder)

Sample data: **

Sample: Biopro 21 (Low fat fully toasted soft soybean powder)
Food group: Protein products
Original packaging: /
Sample quantity: 2500 g
Net quantity: 25 kg
Best used until: 28.12.2021.
Series (LOT): 281220F1A1879
Manufacturer: "Bioproprotein" d.o.o. 30a Bulevar Nikole Tesle st., Zemun, Serbia
Country of origin: Serbia

Sample properly submitted

Sensor analysis

The subject sample is low-fat fully toasted soft soy flour under the commercial name "Biopro-21", obtained by a technological process from grains of genetically unmodified soybean, by removing non-protein substances. The product has a powdery texture, pale cream-brown color, characteristic odor and pleasant, slightly sweet taste.

Method: SBM-03-001

Declaration of Conformity:

The results of the tested parameters are in COMPLIANCE with Article 21, item 2, Article 22, item 4 and Article 25 of the Rulebook on the quality of protein products and mixtures of protein products for the food industry ("Sl. list SFRJ" br. 41/85, "Sl. list SCG" br. 56/03 i 4/04 - dr. pravilnik)

Physico chemical analysis

Parameter:	Result:	(unit)	Ref. value:	Method:
Moisture content	2,1 ±0,1	%	max 8	Sl. List SRFJ br.41/85 metoda 1
Protein (in dry matter)	54,39 ±1,09	%	min 45	Sl. List SRFJ br.41/85 metoda 4
Total ash, on dry basis	3,3 ±0,2	%	max 6.5	Sl. List SRFJ br.41/85 metoda 3
Fat (in dry matter)	7,6 ±0,5	%	max 9	Sl. List SRFJ br.41/85 metoda 2
Cellulose (in dry matter)	1,84 ±0,09	%	max 3.5	Sl. List SRFJ br.41/85 metoda 6

Declaration of Conformity:

The results of the tested parameters are in COMPLIANCE with the Article 25, item 1, Article 25, item 2, Article 25, item 3, Article 25, item 4, Article 25, item 5 of the Rulebook on the quality of protein products and mixtures of protein products for the food industry ("Sl. list SFRJ" br. 41/85, "Sl. list SCG" br. 56/03 i 4/04 - dr. pravilnik)

Applied decision rule:

The rule of shared risk (documented in article 8 of the General laboratory business rules of Centar za ispitivanje namirnica d.o.o., issue 2 of 14.02.2020)

Residue / contaminant analysis

Parameter:	Result:	(unit)	Ref. value/ML:	Method:
<i>Organophosphorus pesticides</i>				
-Cadusafos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Chlorfenvinphos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Chlorpyrifos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Chlorpyrifos-Methyl	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Diazinon	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Dichlorvos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Dimethoate	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Etrifos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Fenitrothion	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Fenthion	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Malathion	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Methacrifos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Parathion	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Parathion-Methyl	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Phosphamidon	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Pirimiphos-Methyl	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Profenofos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018
-Sulprofos	< 0,01	mg/kg		GC-MSD, SRPS EN 15662:2018

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*) Non accredited activities. **) The data provided by customer.

Tag: **CIN-LAB-7.8/O-1** Edition 1 from January 3 2020.

No: **IU-Z-364**

Date: 25/01/21

Carbamates

-Carbaryl	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Methiocarb	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Methomyl	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Oxamyl	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Pirimicarb	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Propoxur	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018

Triazines

-Atrazine	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Cyanazine	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Prometon	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Propazine	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Simazine	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Terbuthylazine	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018

Pyrethroids

-Bifenthrin	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Fenvalerate (sum of isomers, including esfenvalerate)	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Permethrin (sum of isomers)	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-S-Bioallethrin	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018

Organochlorine pesticides

-Aldrin and Dieldrin (combined expressed as dieldrin)	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Chlordane (sum of cis- and trans-chlordane)	< 0,02	mg/kg	GC-MSD, SRPS EN 15662:2018
-DDT (sum of p,p'-DDT, o,p'-DDT, p,p'-DDE, p,p'-DDD)	< 0,03	mg/kg	GC-MSD, SRPS EN 15662:2018
-Endosulfan (alpha-, beta- isomers and endosulfan-sulphate)	< 0,03	mg/kg	GC-MSD, SRPS EN 15662:2018
-Endrin	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Heptachlor (sum of Heptachlor and Heptachlor epoxide)	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Hexachlorobenzene (HCB)	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Hexachlorocyclohexane (HCH), alpha-isomer	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Hexachlorocyclohexane (HCH), beta-isomer	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Lindane (gamma-isomer of hexachlorocyclohexane (HCH))	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018
-Methoxychlor	< 0,01	mg/kg	GC-MSD, SRPS EN 15662:2018

Metals and metalloids

Lead (Pb)	< 0,20	mg/kg	GFAAS, IHM-03-AAS 01
Cadmium (Cd)	< 0,10	mg/kg	GFAAS, IHM-03-AAS 01
Mercury (Hg)	< 0,05	mg/kg	CVAAS, IHM-03-AAS 01
Arsenic (As)	< 0,10	mg/kg	HGAAS, IHM-03-AAS 01

Mycotoxins

Aflatoxin B1 and total (B1+B2+G1+G2)	< 4	µg/kg	IHM-03-ELISA 01a
Aflatoxin B1	< 2	µg/kg	IHM-03-ELISA 01b
Ochratoxin A	< 2	µg/kg	IHM-03-ELISA 10

Genetic analysis

Parameter:	Result:	(unit)	Ref. value/ML:	Method:
<i>Determination of the presence of GMOs</i>				
CaMV 35S promoter	n.d. (< 0,1%)	%	SRPS EN ISO 21571:2009 i A1:2013; SRPS EN ISO 21569:2008 i A1:2014	
A.tum NOS terminator	n.d. (< 0,1%)	%	SRPS EN ISO 21571:2009 i A1:2013; SRPS EN ISO 21569:2008 i A1:2014	
FMV 34S promoter	n.d. (< 0,1%)	%	SRPS EN ISO 21571:2009 i A1:2013; SRPS EN ISO 21569:2008 i A1:2014	
<i>Content RoundUp Ready soybeans</i>				
RoundUp Ready soybeans	n.d. (< 0,1%)	%	SRPS EN ISO 21571:2009 i A1:2013; SRPS EN ISO 21570:2009 i A1:2014	

Declaration of Conformity:

Results of tested parameters ARE IN COMPLIANCE with the Rulebook on the maximum levels of residues of plant protection products in food and feed ("Sl. glasnik RS" no. 132/20), the Rulebook on maximum levels of certain contaminants in food ("Sl. glasnik RS" no. 81/19 and 126/20) and the Law on genetically modified organisms ("Sl. glasnik RS" no. 41/09).

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Tag: **CIN-LAB-7.8/O-1** Edition 1 from January 3 2020.

No: **IU-Z-364**
Date: 25/01/21

NOTE: Determination of mercury, total arsenic and ochratoxin A content were performed upon client's request.

Microbiological analysis

Parameter:	1	2	3	4	5	MAV	Result:	Method:
Bacillus cereus (incubation temp. 30°C) cfu/g	<100	<100	<100	<100	<100	c=1, m=1000, M=10000	Satisfactory	SRPS EN ISO 7932:2009
Enterobacteriaceae (incubation temperature 37°C) cfu/g	<10	<10	<10	<10	<10	c=2, m=10, M=100	Satisfactory	SRPS EN ISO 21528-2:2017
Total plate count cfu/g	300	500	200	300	<100	c=2, m=10000, M=100000	Satisfactory	SRPS EN ISO 4833-1:2014
Clostridium perfringens cfu/g	<10	<10	<10	<10	<10	c=1, m=100, M=1000	Satisfactory	SRPS EN ISO 7937:2010
Listeria monocytogenes 25g	not found	not found	not found	not found	not found	c=0, m=0, M=0	Satisfactory	SRPS EN ISO 11290-1:2017
Salmonella spp. 25g	not found	not found	not found	not found	not found	c=0, m=0, M=0	Satisfactory	SRPS EN ISO 6579-1:2017
Escherichia coli 10g	not found	not found	not found	not found	not found	c=0, m=0, M=0	Satisfactory	MBM-03-027
Mould and yeast (aw less than or equal to 0.95) cfu/g	<100	<100	<100	<100	<100	c=2, m=100, M=1000	Satisfactory	SRPS ISO 21527-2:2011

MDV - with Manufacturing Specification
According to analytical results, the sample is IN COMPLIANCE with Manufacturing Specification

Other analysis

IU-Z-00816 Biopro 21 (Low fat fully toasted soft soybean powder)

Parameter:	Appendix:	Institution:
Radioactivity	Examination report No.2021/57; submitted 19/01/21	Veterinarski fakultet, Beograd
Head/Heads of Departments		
Vladimir Atić, MSc, Graduate Engineer of Tehnology Sensor analysis department		Head of laboratory Milan Simić PhD, Hygiene Specialist
Kristina Lazarević, PhD, Specialist in Chemistry Chemistry department		
Marija M. Stojanović, PhD, Doctor of veterinary medicine Microbiological department		
Milica Jovetić, PhD, Specialist in Sanitary Chemistry Instrumental Chemistry department		

***** End of the Report *****



Client

"Center for food analysis"
Zmaja od Noćaja 11, Belgrade, Serbia
Tel. +381 11 2625 077

Examiner:

Department of Radiology and Radiation hygiene
Tel./Fax +381 11 2685 291
E-mail: radijacija@vet.bg.ac.rs

SUBJECT: EXAMINATION REPORT NO. 2021/57

SAMPLE ACCEPTANCE DATE: 18.01.2021.

SAMPLE ANALYSES DATE: 18.01.2021.

DATE OF ISSUING REPORT: 19.01.2021.

According to your requirement No. IU-Z-364 dated 15/01/2021., the examination regarding the presence of radionuclides is done within the delivered sample and the following report has been made:

1. Sample:

IU - Z - 00816 Biopro 21 (Low fat fully toasted soft soybean flour)

2. Quantity/mass: /

3. Country of Origin: /

4. Importer:

5. Vehicle number: /

6. Sampler: /

7. Link to sampling proceedings: /

8. Investigation method: The sample preparation included homogenization and weighing into a suitable container (IAEA TRS 295). The examination has been done by the method of low-level gamma spectrometry on HPGe detector based on IAEA TRS 295. For detector calibration referents standards were used.

9. Results:

Radionuclide content in the sample (Bq /kg)		ACCORDING REGULATIONS
¹³⁷ Cs	< 1,2	YES
⁴⁰ K	959 ± 50	

10. Conclusion: The results of measured radioactivity in the delivered sample show **no radionuclide presence beyond the regulations** (Council Regulation (EC) No: 733/2008 of 15 July 2008 and 1048/2009 of 23 October 2009.)

Deliver to:

1. Client
2. Archive

Examiner:

Head of Department:

Redovni profesor
Dr sci. vet. med. Nikola Krstić

Dr sci. vet. med. Branislava Mitrović

1. It is forbidden to distributed analysis results without approval from Faculty of veterinary medicine, Department for Radiology and radiation Hygiene
2. Results are valid only for examined sample.

FVM RH ZA/3