

Expert Opinion

File No: **IU-K-951**
Date: **26/12/19**

Applicant: Fabrika proteina i ulja BIOPROTEIN d.o.o. Bulevar Nikole Tesle 30a 11080 Zemun
Documents reff.: Broj: 974 od 19.12.2019.
Type of testing: Food safety (quality, urease activity, microbiological safety upon request, pesticides, heavy metals, mycotixins, radioactivity, GMO)
Sample and identification number:
IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503;
Data on sample Samples submitted 20/12/19
Date of receipt: 20/12/19 Date of completion of lab. analysis: 26/12/19

On the basis of results of laboratory analysis and expert review it was determined that the above stated sample IU-K-02523 from the standpoint 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), Regulation (EC) No 1829/2003 on genetically modified food and feed (OJ L 268/1), 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) and Council Regulation (EC) No.733/2008 of 15 July 2008 and 1048/2009 of 23 October 2009.

The results of microbiological tested parameters are corresponding to the manufacturers specification.

— Head of laboratory
Milan Simić PhD, Hygiene Specialist



Report on laboratory analysis

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Analysis results:

Identification

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Sample: Biopro 25 (low-fat moderate toasted sharp soybean flour)
 Food group: protein products
 Sample quantity: 2 kg
 Best before: 11.12.2020
 Series (LOT): 111219F3A503
 Manufacturer: " Bioprotein " d.o.o. ul Bulevar Nikole Tesle 30A Zemun -Beograd
 Country of origin: Serbia

Sensor analysis

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

The subject sample is low-fat moderately toasted sharp soybean flour under the commercial name " Biopro-25 " obtained by the technological process from grains of genetically unmodified soybeans, removing oil and non-protein materials. The product is a powdery texture of light brown color, distinctive odor, pleasant little sweet taste.

Method:SBM - 03 - 001

Physico chemical analysis

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Parameter:	Result: (unit)	Method:
Ash (calculated in dry matter)	5,85 %	Sl. list SFRJ 41:1985, met. 3
Urease activity (U)	<0,1 (mg N/g) min	SRPS ISO 5506:2001
Cellulose (as dry basis)	2,21 %	Sl. list SFRJ 41:1985, met. 6
proteins (calculated in dry matter)	48,87 %	Sl. list SFRJ 41:1985, met. 4
Moisture	3,53 %	Sl. list SFRJ 41:1985, met. 1
Fat (calculated on the dry matter)	6,70 %	Sl. list SFRJ 41:1985, met. 2

Analysis of harmful matters

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Parameter:	Result: (unit)	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
-Etrimfos	< 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

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-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
<i>Carbamates</i>		
-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
<i>Triazines</i>		
-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
<i>Pyrethroids</i>		
-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
<i>Organochlorine pesticides</i>		
-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
<i>Metals and metalloids</i>		
Lead (Pb)	< 0,10 mg/kg	GFAAS, IHM-03-AAS 01
Cadmium (Cd)	< 0,050 mg/kg	GFAAS, IHM-03-AAS 01
<i>Mycotoxins</i>		
Aflatoxin B1 and total (B1+B2+G1+G2)	< 4,0 µg/kg	IHM-03-ELISA 01a
Aflatoxin B1	< 2,0 µg/kg	IHM-03-ELISA 01b

Genetic analysis

IU-K-02523 BioPro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Parameter:	Result: (unit)	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

Results of research refer exclusively to the submitted samples. The report was forbidden to copy without the consent of the Center for food analysis
 It's not permit to point out the name of Laboratory "Centar za ispitivanje namirnica" in the declaration or for other marketing purposes.

*) Testing sample/Method is out of the scope of accreditation.

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Microbiological analysis

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Parameter:	Result:	Method:										
Bacillus cereus (incubation temp.30°C) cfu/g n= 5 c= 1 m= 100 M= 1000	Satisfactory <table border="1"> <tr><td>I</td><td><100</td></tr> <tr><td>II</td><td><100</td></tr> <tr><td>III</td><td><100</td></tr> <tr><td>IV</td><td><100</td></tr> <tr><td>V</td><td><100</td></tr> </table>	I	<100	II	<100	III	<100	IV	<100	V	<100	SRPS EN ISO 7932:2009
I	<100											
II	<100											
III	<100											
IV	<100											
V	<100											
Enterobacteriaceae (incubation temperature 37°C) cfu/g n= 5 c= 2 m= 10 M= 100	Satisfactory <table border="1"> <tr><td>I</td><td><10</td></tr> <tr><td>II</td><td><10</td></tr> <tr><td>III</td><td><10</td></tr> <tr><td>IV</td><td><10</td></tr> <tr><td>V</td><td><10</td></tr> </table>	I	<10	II	<10	III	<10	IV	<10	V	<10	SRPS EN ISO 21528-2:2017
I	<10											
II	<10											
III	<10											
IV	<10											
V	<10											
Total plate count cfu/g n= 5 c= 2 m= 10000 M= 100000	Satisfactory <table border="1"> <tr><td>I</td><td>1800</td></tr> <tr><td>II</td><td>1600</td></tr> <tr><td>III</td><td>1000</td></tr> <tr><td>IV</td><td>2100</td></tr> <tr><td>V</td><td>1500</td></tr> </table>	I	1800	II	1600	III	1000	IV	2100	V	1500	SRPS EN ISO 4833-1:2014
I	1800											
II	1600											
III	1000											
IV	2100											
V	1500											
Clostridium perfringens cfu/g n= 5 c= 1 m= 100 M= 1000	Satisfactory <table border="1"> <tr><td>I</td><td><100</td></tr> <tr><td>II</td><td><100</td></tr> <tr><td>III</td><td><100</td></tr> <tr><td>IV</td><td><100</td></tr> <tr><td>V</td><td><100</td></tr> </table>	I	<100	II	<100	III	<100	IV	<100	V	<100	SRPS EN ISO 7937:2010
I	<100											
II	<100											
III	<100											
IV	<100											
V	<100											
Listeria monocytogenes 25g n= 5 c= 0 m= 0 M= 0	Satisfactory <table border="1"> <tr><td>I</td><td>0</td></tr> <tr><td>II</td><td>0</td></tr> <tr><td>III</td><td>0</td></tr> <tr><td>IV</td><td>0</td></tr> <tr><td>V</td><td>0</td></tr> </table>	I	0	II	0	III	0	IV	0	V	0	SRPS EN ISO 11290-1:2017
I	0											
II	0											
III	0											
IV	0											
V	0											
Salmonella spp. 25g n= 5 c= 0 m= 0 M= 0	Satisfactory <table border="1"> <tr><td>I</td><td>0</td></tr> <tr><td>II</td><td>0</td></tr> <tr><td>III</td><td>0</td></tr> <tr><td>IV</td><td>0</td></tr> <tr><td>V</td><td>0</td></tr> </table>	I	0	II	0	III	0	IV	0	V	0	SRPS EN ISO 6579-1:2017
I	0											
II	0											
III	0											
IV	0											
V	0											
Mould and yeast (aw less than or equal to 0.95) cfu/g n= 5 c= 2 m= 100 M= 1000	Satisfactory <table border="1"> <tr><td>I</td><td><100</td></tr> <tr><td>II</td><td><100</td></tr> <tr><td>III</td><td><100</td></tr> <tr><td>IV</td><td><100</td></tr> <tr><td>V</td><td><100</td></tr> </table>	I	<100	II	<100	III	<100	IV	<100	V	<100	SRPS ISO 21527-2:2011
I	<100											
II	<100											
III	<100											
IV	<100											
V	<100											

Other analysis

IU-K-02523 Biopro 25 (low fat moderately toasted hard soybean powder) Lot 111219F3A503

Parameter:	Appendix:	Institution:
Radioactivity	; submitted 24/12/19	Veterinarski fakultet, Beograd

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Head/Heads of Departments


Vladimir Atić, MSc, Graduate Engineer of Tehnology


Kristina Lazarević, PhD, Specialist in Chemistry


Marija M. Stojanović, PhD, Doctor of veterinary medicine


Milica Jovetić, PhD, Specialist in Sanitary Chemistry


Head of laboratory
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