

## Expert Opinion

File No: **IU-J-1041/I**

Date: 16/05/19

Applicant: BANKOM D.O.O. Bulevar Nikole Tesle 30 a 11080 ZEMUN

Documents reff.:

Type of testing: Food safety (quality, heavy metals, pesticides, mycotoxins, radioactivity, GMO, nutritional value and microbiological safety)

Sample and identification number:

**IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder;**

Data on sample Samples submitted 23/04/19

Date of receipt: 23/04/19

Date of completion of lab. analysis: 16/05/19

On the basis of results of laboratory analysis and expert review it was determined that the above stated sample IU-J-02797 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) and Council Regulation (EC) No: 733/2008 of July 2008 and No 1048/2009 of 23 October 2009 and 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).

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



Head of laboratory

Milan Simić PhD, Hygiene Specialist

## Report on laboratory analysis

File No: **IU-J-1041/I**

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Data on sample **Samples submitted 23/04/19**

Date of receipt: **23/04/19**

Date of completion of lab. analysis: **16/05/19**

### Analysis results:

#### Identification

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

Sample: BIOPRO 10 - Fat-free toasted soya flour

Food group: Protein products

Samples: 2 kg

Production date: 04.04.2019.

Series (LOT): /

Packaged: "Bankom" d.o.o. Bulevar Nikole Tesle 30A, Zemun, Serbia

Country of origin: Serbia

#### Sensor analysis

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

The subject sample is fat-free toasted soybean flour under the commercial name "Biopro-10" obtained by the technological process from grains of genetically unmodified soybeans, removing oil and non-protein materials. The product is a powdery texture of golden-yellow color, a characteristic odor, a pleasant little sweet taste.

Method: SBM-03-001

#### Physico chemical analysis

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

| Parameter:                          | Result: (unit)    | Method:                                |
|-------------------------------------|-------------------|----------------------------------------|
| Proteins                            | 51,2 g/100g       | SRPS ISO 1871:2013                     |
| Fibre                               | 17,4 g/100g       | AOAC 985.29                            |
| Ash (calculated in dry matter)      | 6,43 %            | Sl. list SFRJ 41:1985, met. 3          |
| Cellulose (as dry basis)            | 2,84 %            | Sl. list SFRJ 41:1985, met. 6          |
| proteins (calculated in dry matter) | 54,59 %           | Sl. list SFRJ 41:1985, met. 4          |
| Moisture                            | 6,21 %            | Sl. list SFRJ 41:1985, met. 1          |
| Sodium (Na)                         | 115 mg/100g       | FAAS, NMKL 180:2005                    |
| Salt (Na x 2.5)                     | 0,3 g/100g        | FAAS, NMKL 180:2005                    |
| Carbon-hydrates                     | 18,1 g/100g       | HEM-03-059                             |
| Total sugar                         | 15,3 g/100g       | SRPS E.L8.007:1980, SRPS E.L8.011:1980 |
| Total fat                           | 1,1 g/100g        | Sl. list SFRJ 41:1987, met. 9          |
| Saturated fatty acids               | 0,5 g/100g        | SRPS EN ISO 12966                      |
| Fat (calculated on the dry matter)  | 1,14 %            | Sl. list SFRJ 41:1985, met. 2          |
| Energy value (per 100 g of product) | 1358 KJ (322kcal) | HEM-03-059                             |

#### Analysis of harmful matters

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

| Parameter:                         | Result: (unit) | Method:                    |
|------------------------------------|----------------|----------------------------|
| <i>Organophosphorus pesticides</i> |                |                            |
| -Cadusafos                         | < 0,01 mg/kg   | GC-MSD, SRPS EN 15662:2012 |
| -Chlorfenvinphos                   | < 0,01 mg/kg   | GC-MSD, SRPS EN 15662:2012 |

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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|                                                             |              |                            |
|-------------------------------------------------------------|--------------|----------------------------|
| -Chlorpyrifos                                               | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Chlorpyrifos-Methyl                                        | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Diazinon                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Dichlorvos                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Dimethoate                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Etrifos                                                    | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Fenitrothion                                               | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Fenthion                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Malathion                                                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Methacrifos                                                | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Parathion                                                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Parathion-Methyl                                           | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Phosphamidon                                               | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Pirimiphos-Methyl                                          | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Profenofos                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Sulprofos                                                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| <b>Carbamates</b>                                           |              |                            |
| -Carbaryl                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Methiocarb                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Methomyl                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Oxamyl                                                     | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Pirimicarb                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Propoxur                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| <b>Triazines</b>                                            |              |                            |
| -Atrazine                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Cyanazine                                                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Prometon                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Propazine                                                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Simazine                                                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Terbutylazine                                              | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| <b>Pyrethroids</b>                                          |              |                            |
| -Bifenthrin                                                 | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Fenvalerate (sum of isomers, including esfenvalerate)      | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Permethrin (sum of isomers)                                | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -S-Bioallethrin                                             | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| <b>Organochlorine pesticides</b>                            |              |                            |
| -Aldrin and Dieldrin (combined expressed as dieldrin)       | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Chlordane (sum of cis- and trans-chlordane)                | < 0,02 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -DDT (sum of p,p'-DDT, o,p'-DDT, p,p'-DDE, p,p'-DDD)        | < 0,03 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Endosulfan (alpha-, beta- isomers and endosulfan-sulphate) | < 0,03 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Endrin                                                     | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Heptachlor (sum of Heptachlor and Heptachlor epoxide)      | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Hexachlorobenzene (HCB)                                    | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Hexachlorocyclohexane (HCH), alpha-isomer                  | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Hexachlorocyclohexane (HCH), beta-isomer                   | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Lindane (gamma-isomer of hexachlorocyclohexane (HCH))      | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| -Methoxychlor                                               | < 0,01 mg/kg | GC-MSD, SRPS EN 15662:2012 |
| <b>Metals and metalloids</b>                                |              |                            |
| Lead (Pb)                                                   | < 0,20 mg/kg | GFAAS, IHM-03-AAS 01       |
| Cadmium (Cd)                                                | < 0,10 mg/kg | GFAAS, IHM-03-AAS 01       |
| Mercury (Hg)                                                | < 0,10 mg/kg | CVAAS, IHM-03-AAS 01       |
| Arsenic (As)                                                | < 0,10 mg/kg | HGAAS, IHM-03-AAS 01       |
| <b>Mycotoxins</b>                                           |              |                            |
| 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

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Parameter:

Result: (unit)

Method:

*Determination of the presence of GMOs*

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|                      |               |                                                                          |
|----------------------|---------------|--------------------------------------------------------------------------|
| CaMV 35S promoter    | n.d. (< 0,1%) | SRPS EN ISO 21571:2009 i<br>A1:2013; SRPS EN ISO<br>21569:2008 i A1:2014 |
| A.tum NOS terminator | n.d. (< 0,1%) | SRPS EN ISO 21571:2009 i<br>A1:2013; SRPS EN ISO<br>21569:2008 i A1:2014 |
| FMV 34S promoter     | n.d. (< 0,1%) | SRPS EN ISO 21571:2009 i<br>A1:2013; SRPS EN ISO<br>21569:2008 i A1:2014 |

*Content RoundUp Ready soybeans*

|                        |               |                                                                          |
|------------------------|---------------|--------------------------------------------------------------------------|
| RoundUp Ready soybeans | n.d. (< 0,1%) | SRPS EN ISO 21571:2009 i<br>A1:2013; SRPS EN ISO<br>21570:2009 i A1:2014 |
|------------------------|---------------|--------------------------------------------------------------------------|

**Microbiological analysis**

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

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

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n= 5  
c= 2  
m= 100  
M= 1000

|     |      |
|-----|------|
| I   | <100 |
| II  | <100 |
| III | <100 |
| IV  | <100 |
| V   | <100 |

### Other analysis

IU-J-02797 BIOPRO 10 - Defatted toasted soybean powder

Parameter:

Appendix:

Institution:

Radioactivity

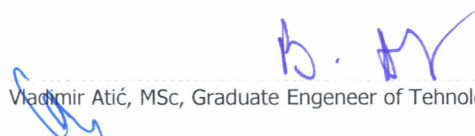
Examination report No.2019/623;  
submitted 27/04/19

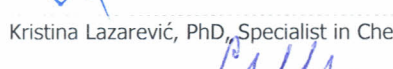
Veterinarski fakultet, Beograd

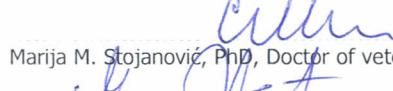
### Note: Replacing the report

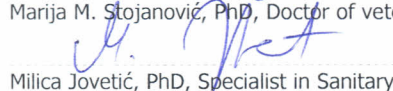
This report on laboratory analysis replaces the report File No. IU-J-1041 from 08/05/19. The reason for replacement of the report is: correction of the name of the company that manufactures - packs the product.

Head/Heads of Departments

  
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Kristina Lazarević, PhD, Specialist in Chemistry

  
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