

## Expert opinion

BANKOM d.o.o. BEOGRAD

delovodni broj: 2977

datum: 20. 07. 2015 Beograd

File no : **IU-D-1034**

Date: 09/07/15

Applicant: BANKOM D.O.O. Bulevar Nikole Tesle 30 a 11070 N.Beograd

Reference to another document:

Type of testing: Food safety (quality, residue analysis of pesticides and heavy metals, PCB, mycotoxins, antibiotic and sulphonamide residues, radioactivity, GMO, microbiological safety upon client's request, nutritive value )

Sample and identification number:

**IU-D-02929 Absolut Cream Plus ice cream base;**

Date of receipt: 26/06/15

Date of completion of laboratory analysis: 09/07/15

On the basis of results of laboratory analysis and expert review, it was determined that the above stated sample IU-D-02929 in terms of analysis parameters, MEETS the conditions prescribed by the Law on Food Safety (Official Gazette of RS 41/09), and related to the Rulebook on the quality of dairy products and starter cultures (Official Gazette of RS no. 33/10; Official Gazette of RS no. 69/10; Official Gazette of RS no. 34/14), the Rulebook on Declaration and Labelling and Advertising of Food (Official Gazette of RS no. 85/2013, 101/2013), the Rulebook on Food Additives (Official Gazette of RS no. 63/2013), the Manufacturing Specification, the Rules on Quantities of Pesticides, Metals, Metalloids and Other Poison Substances, Chemotherapeutics, Anabolic and Other substances which can be found in Foodstuff (Official Journal of FRY no. 5/92, 11/92 and 32/02), the Rulebook on the maximum residue levels of pesticides in food and feed of plant for which is set maximum allowed quantity of residue levels of pesticides (Official Gazette of RS, no. 29/14, 37/14, 39/14, 72/14) the Rulebook on Limits of Radionuclides Content in Drinking Water, Foodstuffs, Feeding Stuffs, Medicines, General Use Products, Construction Materials and Other Goods placed on the Market (Official Gazette of RS 86/11, 97/13), and Article 3 of the Law on Genetically modified organisms (Official Gazette of RS, no.41/2009).

The results of microbiological analyses comply with the Manufacturing Specification.

NOTE: Determining content of aflatoxin M1 was conducted at a client's request. The obtained result of aflatoxin M1 content in sample IU-D-02929 is smaller than the maximum allowed quantity (0.05 µg/kg) for raw milk, thermal processed milk and milk for the production of dairy products (Article 5, Appendix 4, Section 2, item 2.1.14.) prescribed by the Rulebook on the maximum residue levels of pesticides in food and feed of plant for which is set maximum allowed quantity of residue levels of pesticides (Official Gazette of RS, no. 29/14, 37/14, 39/14, 72/14).



Laboratory Manager

Milan Simić, PhD, Hygiene Specialist



## Report on Laboratory Analysis

File no : **IU-D-1034**

Date: **09/07/15**

Applicant: BANKOM D.O.O. Bulevar Nikole Tesle 30 a 11070 N.Beograd

Reference to another document:

Type of testing: Food safety (quality, residue analysis of pesticides and heavy metals, PCB, mycotoxins, antibiotic and sulphonamide residues, radioactivity, GMO, microbiological safety upon client's request, nutritive value )

Sample and identification number:

**IU-D-02929 Absolut Cream Plus ice cream base;**

Date of receipt: **26/06/15**

Date of completion of laboratory analysis:  
**09/07/15**

### Analysis results:

#### Identification

IU-D-02929 Absolut Cream Plus ice cream base

Sample: Absolut Cream Plus - Ice cream base, powder

Food group: Powdered mixture

Quantity of sample: 2500 g

Net quantity: 20kg

Date of manufacture: 24/06/2015

Best before: 24/06/2016

(LOT): 047115/15

Storage conditions: Store and keep in a dry, cool, well-ventilated and dark place

Manufacturer: Bankom doo, Bulevar Nikole Tesle 30a, 11080 Zemun, Republic of Serbia / Manufacturing Plant: Bioprotein AD, Nemanjina bb, Obrenovac, Republic of Serbia

Country of origin: Republic of Serbia

Other data relevant for the consumer: the sample contains a label with printed manufacturer's declaration.

Ingredients: hydrogenated vegetable fat, SKIMMED MILK, dextrose, maltodextrin, modified starch, glucose syrup, emulsifiers: E 472a, E 472b, E 471, MILK PROTEIN, thickeners: E 412, E 466, E 410, E 407, E 401, aroma..

Instruction for use: 70g of Absolut Cream Plus base + 125g Biolac-S (substitute for milk powder, manufacturer: Bankom, Beograd) + 1L water + 200g sugar

Method: hot and cold

Manufactured according to the Manufacturing Specification in accordance with:

the Law on Food Safety (Official Gazette of RS no. 41/09)

the Rulebook on the quality of dairy products and starter cultures (Official Gazette of RS no. 33/10; Official Gazette of RS no. 69/10; Official Gazette of RS no. 34/14)

the Rulebook on Declaration and Labelling and Advertising of Food ("Official Gazette of RS" br.85/2013, 101/2013)

the Rulebook on Food Additives (Official Gazette of RS no. 63/2013)

#### Sensory Analysis

IU-D-02929 Absolut Cream Plus ice cream base

The sample consists of a powder mixture (base) for the production of an ice cream commercially called "Absolut Cream Plus".

The mixture is packed in a plastic bag properly closed and labelled.

The packaging is not damaged.

The ice cream mixture is white and yellowish in the form of fine powder.

The smell and taste are characteristic and vanilla-like..

-Method: SAM-03-001

#### Physico-Chemical Analysis

IU-D-02929 Absolut Cream Plus ice cream base

| Parameter:                       | Result: (u. m.)   | Method:                                   |
|----------------------------------|-------------------|-------------------------------------------|
| Saturated fatty acids            | 21.7 g/100g       | SRPS EN ISO 12966-3, SRPS EN ISO 5508     |
| Salt                             | 0.8 g/100g        | Calculation method ( Na x 2.5 )           |
| Total fats                       | 23.0 g/100g       | Off. Journal SFRY 41/87 method 9          |
| Carbohydrates                    | 50.9 g/100g       | Calculated by subtraction                 |
| Total sugars                     | 4.6 g/100g        | SRPS E.L8.007:1980 and SRPS E.L8.011:1980 |
| Sodium (Na)                      | 313 mg/100g       | FAAS,NMKL 180 (2005)                      |
| Proteins                         | 14.8 g/100g       | SRPS ISO 1871:2013                        |
| Fibres                           | 3.7 g/100g        | AOAC 985.29                               |
| Energy value (100 g of products) | 1997 kJ (475kcal) | HEM-03-059                                |

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\*) The method is not part of laboratory accreditation.



File no: **IU-D-1034**  
Date: 09/07/15

### Safety parameters analysis

IU-D-02929 Absolut Cream Plus ice cream base

| Parameter:                                        | Result: (u. m.) | Method:                 |
|---------------------------------------------------|-----------------|-------------------------|
| <b>Organochlorine pesticides</b>                  |                 |                         |
| -HCH (isomers of alpha, delta and beta)           | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -Lindane                                          | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -Aldrin and dieldrin                              | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -Heptachlor and heptachlor epoxide                | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -DDT and derivatives                              | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -Endrin                                           | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| -Endosulfan (isomers of alpha, beta and sulphate) | < 0,01 mg/kg    | GC-MS, EN 15662:2008    |
| <b>Polychlorinated biphenyls</b>                  |                 |                         |
| * Polychlorinated biphenyls                       | < 0,100 mg/kg   | GC-MS, SRPS EN 15662:20 |
| <b>Metals and Metalloids</b>                      |                 |                         |
| Lead (Pb)                                         | < 0,20 mg/kg    | GFAAS, IHM-03-AAS 01    |
| Cadmium (Cd)                                      | < 0,05 mg/kg    | GFAAS, IHM-03-AAS 01    |
| Mercury (Hg)                                      | < 0,05 mg/kg    | HGAAS, IHM-03-AAS 01    |
| Arsenic (As)                                      | < 0,10 mg/kg    | HGAAS, IHM-03-AAS 01    |
| <b>Mycotoxins</b>                                 |                 |                         |
| Aflatoxin M1                                      | < 0,025 µg/kg   | IHM-03-ELISA 02         |
| <b>Antibiotics</b>                                |                 |                         |
| Chloramphenicol                                   | < 0,5 µg/kg     | IHM-03-ELISA 03         |

### Microbiological analysis

IU-D-02929 Absolut Cream Plus ice cream base

| Parameter:                                                            | Result:   | Method:                            |
|-----------------------------------------------------------------------|-----------|------------------------------------|
| <b>Enterobacteriaceae (Incubation temp. 37C) cfu/g</b>                |           |                                    |
| n= 5                                                                  | I         | Satisfactory SRPS ISO 21528-2:2009 |
| c= 5                                                                  | II        | <10                                |
| m=                                                                    | III       | <10                                |
| M= 10                                                                 | IV        | <10                                |
|                                                                       | V         | <10                                |
| <b>Salmonella spp 25g</b>                                             |           |                                    |
| n= 5                                                                  | I         | Satisfactory SRPS EN 6579:2008     |
| c= 5                                                                  | II        | 0                                  |
| m=                                                                    | III       | 0                                  |
| M=                                                                    | IV        | 0                                  |
|                                                                       | V         | 0                                  |
| <b>Coagulase-positive staphylococcus (Incubation temp. 37C) cfu/g</b> |           |                                    |
| n= 5                                                                  | I         | Satisfactory SRPS ISO 6888-1:2009  |
| c= 5                                                                  | II        | <1                                 |
| m= 10                                                                 | III       | <1                                 |
| M= 100                                                                | IV        | <1                                 |
|                                                                       | V         | <1                                 |
| Antibiotic residues                                                   | not found | MBM-03-014*                        |
| Sulphonamide residues                                                 | not found | MBM-03-013*                        |

### Other analyses

IU-D-02929 Absolut Cream Plus ice cream base

| Parameter:                                                          | Attachment:                                                   | Institution:                 |
|---------------------------------------------------------------------|---------------------------------------------------------------|------------------------------|
| GMO (Quantitative analysis of - genetically modified organism in %) | Report on lab analysis no. R15-7957; arrived to CIN 04/07/15  | SP Laboratorija AD, Bečej    |
| Radioactivity                                                       | Report on lab analysis no. 2015/1282; arrived to CIN 04/07/15 | Veterinary Faculty, Belgrade |

File no: **IU-D-1034**

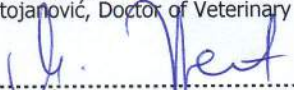
Date: 09/07/15

Head/Analyst of Division

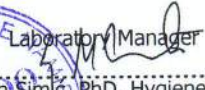
  
Zorana Tadić, Doctor of Veterinary Medicine

  
Margarita Dodevska, BSc, Specialist in Sanitary Chemistry

  
Marija M. Stojanović, Doctor of Veterinary Medicine.

  
Smiljana Raičević, Doctor of Veterinary Medicine, Graduate Chemist



  
Milan Simić, PhD, Hygiene Specialist



Faculty of Veterinary medicine  
University of Belgrade  
Department of Radiology and  
Radiation hygiene  
Bulevar Oslobođenja 18  
Belgrade  
Serbia



FAKULTET VETERINARSKE MEDICINE  
U BEOGRADU  
KATEDRA ZA RADIOLOGIJU  
I RADIJACONU HIGIJENU  
BR. 1282  
30.06. 2015. GOD  
BEOGRAD



**Client**

» Center for food analysis«  
Zmaja od Noca br.11  
Belgrade  
Serbia  
Tel. 011-2625-077

Department of Radiology and  
Radiation hygiene  
Tel. 011-2685-291  
Fax 011-2685-291  
E-mail: radijacija@vet.bg.ac.rs

**SUBJECT: EXAMINATION REPORT NO. 2015/1282**

**SAMPLE ACCEPTANCE DATE:** 29.06.2015.

**DATE OF ISSUING REPORT:** 30.06.2015.

According to your requirement No. IU - D - 1034 dated 26/06/2015, the examination regarding the presence of radionuclides is done within the delivered sample and the following report has been made:

**R E S U L T**

**Sample:**

1.IU - D - 02929 Ice-cream base Absolut Cream Plus

**Country of Origin: /**

**Evidential number: 15/1282**

| Radionuclide content in the sample (Bq / kg) |                 |
|----------------------------------------------|-----------------|
| <sup>137</sup> Cs                            | <sup>40</sup> K |
| < 0,3                                        | 307 ± 14        |

The results of measured radioactivity in the delivered sample **show no radionuclide presence beyond the regulations** (Official Gazette RS 86/2011 issued 18.11.2011. and Official Gazette RS 97/13 issued 6.11.2013.).

The examination has been done by the method of low-level gamma spectrometry on HPGe detector based on IAEA Technical Report 295.

**Deliver to:**

- 1.Client
- 2.Archive

**Examiner:**

Stručni saradnik  
Andrić Velibor  
Andrić Velibor



**2a Head of Department:**

Dr sci. vet. med Branislav Mitrović  
Branislav Mitrović

1. It is forbidden to distribute 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



Datum 14. 07. 2015

Broj izv. 3483



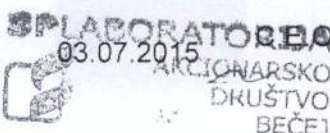
**LIST OF ANALYZED SAMPLES**  
**Number R15-7957**

Directive for analysis: IU-D-1034 of 26.06.2015

|               |                                                                                           |
|---------------|-------------------------------------------------------------------------------------------|
| Sample number | R15063105                                                                                 |
| Sample name   | IU-D-02929 - BASE FOR ICE CREAM ABSOLUT CREAM PLUS - base for the production of ice cream |

MS Aleksandra Bauer  
General Manager

M.P.



MS Milica Rankov Šicar  
of Samples Booking and Analysis  
Supervision Dpt.

**Sent to**

1. Applicant
2. Archive

**Statement:**

1. Results of the analysis are referred only to the examined sample.
2. This report must not be multiplied, except on the whole, with approval of the SP LABORATORY.

(R15-7957) page 1 / 1



**CERTIFICATE OF ANALYSIS R15-7957**

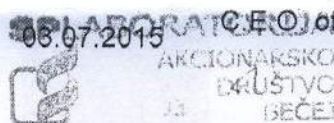
**Sample number: R15063105**

|                               |                                                                                           |
|-------------------------------|-------------------------------------------------------------------------------------------|
| <b>Applicant</b>              | CENTAR ZA ISPITIVANJE NAMIRNICA DOO CIN BEOGRAD, ZMAJA OD NOČAJA 11                       |
| <b>Directive for analysis</b> | IU-D-1034 of 26.06.2015                                                                   |
| <b>Sample name</b>            | IU-D-02929 - BASE FOR ICE CREAM ABSOLUT CREAM PLUS - base for the production of ice cream |
| <b>Asked analysis</b>         | GMO analiza by client's request                                                           |
| <b>Sampling data</b>          | Sample was delivered 29.06.2015                                                           |
| <b>Sample receiving date</b>  | 29.06.2015                                                                                |
| <b>Start testing date</b>     | 29.06.2015                                                                                |
| <b>End testing date</b>       | 03.07.2015                                                                                |
| <b>Report number</b>          | R15-7957                                                                                  |

MS Aleksandra Bauer  
General Manager

M.P.

MS Milica Rankov Šicar  
CEO of Samples Booking and Analysis  
Supervision Dpt.



**Sent to**

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2. Archive

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**R15063105: IU-D-02929 - BASE FOR ICE CREAM ABSOLUT CREAM PLUS - base for the production of ice cream**

**Identification:**

Producer: FABRIKA PROTEINA I ULJA "BIOPROTEIN" A.D. - production section BIOPROTEIN A.D., Nemanjina bb, Obrenovac, Srbija  
Date of production: 24.06.2015.  
Expiry date: 1 year  
Lot no.: 047/15

**Results of genetic testing**

| Analysis                            | Result | Reference data | Methods                          |               |
|-------------------------------------|--------|----------------|----------------------------------|---------------|
| Testing of genetic modification [%] | < 0,05 | max 0,9        | JRC GMO Protocol <sup>159)</sup> | Real Time PCR |

Analysis JRC GMO Protocol are within the flexible scope of accreditation.

MET 789 - Testing of genetic modification was performed by Real Time PCR approach:  
-General-specific primers for the CaMV35S promoter and NOS terminator (element-specific), with a detection limit of 0,05%

Source of reference values- of the Law on Genetically Modified Organisms (Official Gazette of RS 41/2009) Art. 3

<sup>159)</sup>JRC Compendium of reference methods for GMO analysis

MS Gordana Nović  
C.E.O. of Genetical and Physical-Chemical  
Analysis Dpt.

MS Predrag Vulićević  
Specialist in Sanitary Chemistry