CENTAR ZA ISPITIVANJE NAMIRNICA d.o.o. Center for food analysis
Belgrade, Zmaja od Noćaja 11, CIN 07045905, FIN 100066891
phone: laboratory 2625-077, accountings 2626-241, director 2185-567
fax 2625-720, e-mail kontakt@cin.co.rs, web www.cin.co.rs
265-1630310003954-87 Raiffeisen Bank AD Beograd, 160-315578-62 Banca Intesa AD Beograd

Expert Opinion

Ev. No: **IU-K-742**
Date: 27/12/16

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

Other documents:

Request analysis: Food safety (quality; heavy metals, pesticides, mycotoxins, GMO, antibiotic and sulphonamide residues, content of radionuclides; microbiological safety)

Sample and identification number:

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein);

Sample data: Samples submitted 22/12/16

Date of receipt: 22/12/16 Date of complete: 27/12/16

On the basis of results of laboratory anallysis and expert review it was determined that the above stated sample IU-K-02190 from the standpoint of controlled parameters IS IN COMPLIANCE WITH 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 foodstaffs (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), Residues of antibiotics and sulphonamides were tested by recognized instrumental confirmation technic (LC-MS/MS) at LoD defined by appropriate EU legislation and Council Regulation (EC) No 1048/2009 of 23 October 2009.

Microbiological analysis was performed from one sample unite and upon client's request.

Results of tested microbiological parameters are corresponding to manufacturer's specification.

Head of laboratory
Dr sc. med. Milan Simić, spec. hig.

Results of laboratory tests are given in Apendix comprising an integral part of expert opinion.

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Test report

Ev. No: **IU-K-742**
Date: 27/12/16

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

Other documents:

Request analysis: Food safety (quality; heavy metals, pesticides, mycotoxins, GMO, antibiotic and sulphonamide residues, content of radionuclides; microbiological safety)

Sample and identification number:

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein);

Sample data: Samples submitted 22/12/16

Date of receipt: 22/12/16 Date of complete: 27/12/16

Test results:

Identification

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

Sample: Biolac-10 - product based on whey powder, vegetable fat and protein
Food group: Mixed product/ Other food
Ingredients: WHEY powder, concentrated vegetable fat and protein, LACTOSE whey, full fat moderately toasted soft SOYBEAN powder, cream flavouring
Information on allergens: lactose whey, soy powder
Net quantity: 20kg
Use by: 13/09/2017
Series(LOT): 073/16
Storage conditions: Store and keep in dry, cool place
Veterinary control number: RS 20441
Manufacturer: Bankom doo, Bulevar Nikole Tesle 30a, 11080 Zemun, Serbia; Manufacturing plant: Bioprotein AD, Nemanjina bb, Obrenovac
Country of origin: Republic of Serbia
Other data relevant for consumer: The sample contains a label with printed manufacturers declaration in Serbian language
Chemical composition: moisture content max 4%, protein min 10%, fat content min 23%, ash content max 6.5%, lactose min 50%
Usage: Special-purpose product for use in bakers confectionery, bakery and confectionery industry, for products which require a higher percentage of fat. It is used in food industry for all kinds of spreads, creams, whipping creams and biscuits.
Method of usage: dissolve 130g Biolac 10 in 870 ml water or according to the recipe for specific product
Nutritive value 100g of product:
Energy value 2023 kJ/ 482 kcl;
Fat 23,2 g out of which-saturated fatty acid s11,1 g;
Carbohydrates 58,6 g out of which-sugar g;
Proteins 1 g;
So 2,65 g

Sensor analysis

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

The sample consists of the mixed powder product, under the trade name "Biolac -10".
The product is mixture of powdered whey, concentrate of vegetable fats and proteins and lactose whey, soy powder and cream flavouring.
The product is yellowish-white colour in the form of fine powder, free of lumps and traces of foreign matter.
Smell and taste: characteristic
The product is used in bakers? confectionery, bakery and confectionery industry, for products which require a higher percentage of fat. It is used in food industry for all kinds of cakes, spreads, creams, whipping creams and biscuits.
Reconstituted product is of liquid consistency, yellowish-white colour, characteristic odour and taste. Method: SAM-03-001

Physical and chemical examinations

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

Parameter:	Result:	(unit)	Method:
Fat	23,82	%	Sl. List SFRJ 41/87, method 9
Moisture	2,69	%	Sl. List SFRJ 41/87, method 1
Protein	10.02	%	SRPS ISO 1871:2013
Ash	6,06	%	Sl. List SFRJ 41/87, method 5

Analysis of harmful matters

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

*) Method is out of the scope of accreditation.

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No: **IU-K-742**
Date: 27/12/16

Parameter:	Result: (unit)	Method:
	< 20 µg/kg	IHM-03-HPLC 07
Organophosphorus pesticides		
- Chlorpyrifos (Dursban)	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Chlorpyrifos methyl	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Diazinon	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Dichlorvos	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Dimethoate	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Disulfoton	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Etrimfos	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Famfur	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Fenitrothion	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Forat	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Malathion	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Methacrifos	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Methyl parathion	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Parathion	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Phosphamidon	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Pirimiphos methyl	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Sulfotep	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Thionazin	< 0,01 mg/kg	GC-MS,EN 15662:2008
Carbamates		
- Carbaryl	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Carbofuran	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Methiocarb	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Methomyl	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Oxamyl	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Propoxur	< 0,01 mg/kg	GC-MS,EN 15662:2008
Triazines		
- Cyanazine (bladex)	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Desethylatrazine	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Desisopropylatrazine	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Prometon	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Propazine	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Simazine	< 0,01 mg/kg	GC-MS,EN 15662:2008
Pyrethroids		
- Bifenthrin	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Fenvalerate	< 0,01 mg/kg	GC-MS,EN 15662:2008
- Permetrin	< 0,01 mg/kg	GC-MS,EN 15662:2008
- S-Bioallethrin	< 0,01 mg/kg	GC-MS,EN 15662:2008
Organochlorine pesticides		
Hexachlorbenzene (HCB)	< 0,01 mg/kg	GC-MS,EN 15662:2008
HCH (alpha, delta and beta isomers)	< 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 its derivates	< 0,01 mg/kg	GC-MS,EN 15662:2008
Endrin	< 0,01 mg/kg	GC-MS,EN 15662:2008
Endosulfan (alpha, beta and sulphate isomers)	< 0,01 mg/kg	GC-MS,EN 15662:2008
Metals and metalloids		
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
Mycotoxins		
Aflatoxin M1	< 0,025 µg/kg	IHM-03-ELISA 02
Content RoundUp Ready soybeans		
RoundUp Ready soybeans	n.d. (< 0,1%)	SRPS EN ISO 21571:2009 i
Determination of the presence of GMOs		
CaMV 35S promoter	n.d. (< 0,1%)	SRPS EN ISO 21571:2009 i
A.tum NOS terminator	n.d. (< 0,1%)	SRPS EN ISO 21571:2009 i

*) Method is out of the scope of accreditation.

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No: **IU-K-742**
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FMV 34S promoter	n.d. (< 0,1%)	SRPS EN ISO 21571:2009 i

Microbiological examinations

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

Parameter:		Result:	Method:
		not found	MBM-03-033 (II)
Enterobacteriaceae cfu/g		Satisfactory	SRPS ISO 21528-2:2009
n= 5	I	<10	
c= 0	II	<10	
m= 0	III	<10	
M= 0	IV	<10	
	V	<10	
Salmonella species 25g		Satisfactory	SRPS EN ISO 6579:2008
n= 5	I	0	
c= 0	II	0	
m= 0	III	0	
M= 0	IV	0	
	V	0	
Coagulase-positive staphylococcus (incubation temperature 37°C) cfu/g		Satisfactory	SRPS EN ISO 6888-1:2009
n= 5	I	<10	
c= 0	II	<10	
m= 0	III	<10	
M= 0	IV	<10	
	V	<10	

Other examinations

IU-K-02190 Biolac-10 (product based on whey powder, vegetable fat and protein)

Parameter:	Apendix:	Institution:
Radioactivity	Examination report No. 2016/2872; submitted 27/12/16	Veterinarski fakultet, Beograd

Head/Heads of Departments

spec. Dr. vet. Zorana Tadić

Dr sci. med. Margarita Dodevska

Dr sci vet. med. Marija M. Stojanović

Dr sc. vet. Smiljana Raičević, dipl. hem, spec. bioh.

CENTAR ZA ISPITIVANJE NAMIRNICA CIN DOO BEOGRAD III

Head of laboratory

Dr sc. med. Milan Simić, spec. hig.

*) Method is out of the scope of accreditation.