

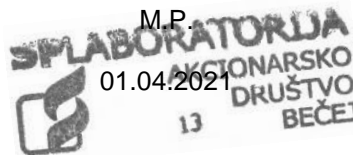


APPENDIX TO THE CERTIFICATE OF ANALYSIS
R21-5938 for sample R21034205

Directive for analysis: from 26.03.2021

Sample number	R21034205
Sample name	SOYBEAN OIL (lot mark: 03-21; 05-21; 07-21; 08-21; 09-21; 11-21)
Based on these data, the analyzed sample is in compliance with SRPS E.K1.025/2014 for crude soybean oil-served.	
STATEMENT OF CONFORMITY PHYSICAL-CHEMICAL CONTAMINANTS/RESIDUES TESTING:	
Based on the results of the analyzed parameters sample is in compliance with art.3 appendix 2, art.5, appendix 4, art.6 i art.7 Regulation on the maximum permitted quantities of residues of plant protection products in food and feed (Official Gazette of RS 132/20).	
STATEMENT OF CONFORMITY PHYSICAL-CHEMICAL TESTING:	
Based on the results of the parameters analyzed sample is in compliance with SRPS E.K1.025/2014 for crude soybean oil-served in terms of water content and volatile matter, phosphorus content, free fat acid (as oleic), relative volumetric mass, refractive index, iodine value by Vijs (Note: conformity cannot be confirmed, with a confidence level of 95% for extended measurement uncertainty, for relative bulk density), art.11, appendix 2, part A, table 2, point 9 Regulation on food additives (Official Gazette of RS 53/2018).	

Aleksandra Bauer MS
General Manager



Milica Rankov MS
C.E.O. of Samples Booking
and Analysis Supervision Dpt.

By certificate of analysis number R21-5938 sample was analyzed R21034205.

Sent to

1. Applicant
2. Archive

Statement:

1. The results of the test relate only to the submitted sample, except when SP LABORATORIJA performs sampling.
2. This report must not be multiplied, except on the whole, with approval of SP LABORATORIJA.
3. SP LABORATORIJA is responsible for all data presented in the Test Report except for those obtained from the test users.
4. SP LABORATORIJA gives up the responsibility for the validity of the results for whose statements the data obtained from the users have been used.

CERTIFICATE OF ANALYSIS R21-5938 / R21034205
Sample number: R21034205

Applicant	ZEMLJORADNIČKA ZADRUGA BAČEX BAČ, JNA 113A
Directive for analysis	from 26.03.2021
Sample name	SOYBEAN OIL (lot mark: 03-21; 05-21; 07-21; 08-21; 09-21; 11-21)
Asked analysis	Analysis by client's request
Sampling data	Sample was delivered 26.03.2021
Sample receiving date	26.03.2021
Start testing date	26.03.2021
End testing date	01.04.2021
Report number	R21-5938

Aleksandra Bauer MS
General Manager



Milica Rankov MS
C.E.O. of Samples Booking
and Analysis Supervision Dpt.

By certificate of analysis number R21-5938 sample was analyzed R21034205.

Sent to

1. Applicant
2. Archive

Statement:

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R21034205: SOYBEAN OIL (lot mark: 03-21; 05-21; 07-21; 08-21; 09-21; 11-21)

Identification:

Net weight of delivered sample: 5 l

-General look:

Sample was delivered in bulk. With a sample was delivered documentation with data about the sample.

Based on delivered documentation Sample is soybean oil. Sample is viscous liquid consistency, clear, yellow orange, the odor inherent in crude oil. Sample does not contain foreign odor, neither is present odor of rancidity.

dipl. inž. Maja Jovanov

Results of physical-chemical contaminants/residues testing

Analysis	Result	Expanded measurement uncertainty ⁹⁾	Methods	
Residue of pesticides (shown in the table 1) [mg/kg]	< 0,05 ²⁾	± 50%	SRPS EN 12396-2	GC/ECD/HSS
Residue of pesticides (shown in the table 2) [mg/kg]	< 0,003 ²⁾	± 50%	SRPS EN 15662	GC/MS/MS
Residue of pesticides (shown in the table 3) [mg/kg]	< 0,005 ²⁾	± 50%	SRPS EN 15662	GC/MS/MS
Residue of pesticides (shown in the table 4) [mg/kg]	< 0,01 ²⁾	± 50%	SRPS EN 15662	GC/MS/MS
Residue of pesticides (shown in the table 5) [mg/kg]	< 0,01 ²⁾	± 50%	SRPS EN 15662	LC/MS/MS

²⁾Limit of quantification (LOQ); ⁹⁾Extended measurement uncertainty is expressed as a combined standard measurement uncertainty increased by the coverage factor k = 2 for a confidence level of approximately 95%
Determination of pesticide residues by SRPS EN 15662; SRPS EN 12396-2 is within the flexible scope of accreditation.

Note

Source of reference values: art.3 appendix 2, art.5, appendix 4, art.6 and art.7 Regulation on the maximum permitted quantities of residues of plant protection products in food and feed (Official Gazette of RS 132/20).

Testing of genetic modification

Analysis	Result	LOD [%]	Methods	
Detection of genetic modification-GTS 40-3-2 (RoundUp Ready)	Not detected	0,05	JRC GMO Protocol ¹⁵⁹⁾	Real Time PCR

LOD - limit of detection;

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

Note

According to article 3 of the Law on Genetically Modified Organisms (Official Gazette of RS 41/2009), genetically modified organisms is not considered an agricultural product of vegetable origin contain up to 0.9% threshold of genetically modified organisms and impurities of genetically modified organisms.

Seed and reproductive material are not considered genetically modified organisms if contain up to 0.1% threshold of genetically modified organisms and impurities of genetically modified organisms.

Results of physical-chemical testing

Analysis	Result	Expanded measurement uncertainty ⁹⁾	Reference data	Methods	
Water content and volatile matter [%]	0,05	± 0,019	max 0,30	SRPS EN ISO 662:2017	Drying
Phosphorus [mg/kg]	33	± 3,2	max 150	AOCS Ca 12-55:2017	Spectrophotometry
Free fatty acid (as oleic) [%]	0,16	± 0,033	max 1,50	SRPS EN ISO 660:2015	Volumetry
Relative bulk density (20/20°C)	0,9190	± 0,00184	0,9190 - 0,9250	SRPS EN ISO 6883:2017	Pycnometry
Index of refraction (40°C)	1,4673	± 0,00088	1,4660 - 1,4700	SRPS EN ISO 6320:2017	Refractometry
Iodine number by Vijs [g/100g]	129,0	± 4,52	124,0 - 139,0	SRPS EN ISO 3961:2019	Volumetry
Synthetic colors	Not present		Not allowed	NMKL 114:1985	Test

⁹⁾Extended measurement uncertainty is expressed as a combined standard measurement uncertainty increased by the coverage factor k = 2 for a confidence level of approximately 95%

Note

Source of reference values: SRPS E.K1.025/2014 za Crude oil od soje-odsluzeno and art.11, appendix 2, part A, table 2, point 9 Regulation on food additives (Official Gazette of RS 53/2018).

Table 1 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)
Dithiocarbamates (expressed as CS ₂ , including Ziram, Thiram, Maneb, Mancozeb, Propineb, Metiram)

Table 2 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)	
Cadusafos	Fensulfothion

Table 3 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)
Tetrahydrophthalimide (THPI)

Table 4 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)					
2,4-DDT	4,4' - DDD	4,4' - DDE	4,4' - DDT	Acetochlor	Acibenzolar-S-methyl
Aclofenif	Acrinathrin	Alachlor	Aldrin	Alpha-BHC	Aramite
Atrazin	Azinphos-ethyl	Azinphos-methyl	Beflubutamid	Benalaxyl	Benfluralin
Benthiavalicarb-isopropyl	Beta-BHC	Bifenox	Bifenthrin	Binapacryl	Biphenyl
Bitertanol	Boscalid (Nicofen)	Bromophos-ethyl	Brompropylate	Bromuconazole I	Bromuconazole II
Bupirimate	Buprofezin	Butralin	Captafol	Captan	Carboxin
Carfentrazone-ethyl	Chlorbenside	Chlordan-cis	Chlordan-trans	Chlorfenapyr	Chlorfenson
Chlorfenvinphos	Chlorobenzilate	Chlorothalonil	Chlorpropham	Chlorpyrifos-ethyl	Chlorpyrifos-methyl
Chlorthal-dimethyl	Chlozolinat	Cinidon-ethyl	Clomazone	Cyflufenamid	Cyfluthrin I
Cyfluthrin II	Cyfluthrin III	Cyfluthrin IV	Cyhalofop-butyl	Cypermethrin I	Cypermethrin II
Cypermethrin III	Cypermethrin IV	Cyproconazole	Cyprodinil	Delta-BHC	Deltamethrin
Diallate I	Diallate II	Diazinon	Dichlobenil	Dichlorvos	Diclofop methyl
Dicloran	Dieldrin	Difenoconazol	Diflufenican	Dimethachlor	Dimethipin
Dimethomorph (E)	Dimethomorph (Z)	Dimoxystrobin	Diniconazole	Diphenylamine	Disulfoton
Disulfoton sulfone	Endosulfan I (alpha)	Endosulfan II (beta)	Endosulfan sulfate	Endrin	Endrin aldehyde
Endrin ketone	Epoconazole	Esfenvalerate	Ethion	Ethofenprox	Ethoprophos
Ethoxyquin	Etoazole	Etridiazole	Famoxadone	Fenamidone	Fenamiphos
Fenarimol	Fenazaquin	Fenbuconazole	Fenchlorphos	Fenitrothion	Fenoxaprop-p-ethyl
Fenproprathrin	Fenpropidin	Fenpropimorph	Fenthion	Fenthion sulfoxide	Fenvalerate
Fipronil	Fluazifop-p-butyl	Flucythrinate I	Flucythrinate II	Flufenacet	Flumioxazin
Flurochloridone	Fluquinconazole	Fluroxypyr 1-methylheptyl ester	Flurprimidol	Flusilazole	Flutolanil
Flutriafol	Folpet	Heptachlor	Heptachlor epoxide-cis (exo)	Hexachlorobenzene (HCB)	Hexaconazole
Imazalil	Ipconazole	Iprodione	Isoxaflutole	Kresoxim-methyl	Lactofen
Lambda-Cyhalothrin	Lindan (Gama-BHC)	Malaaxon	Malathion	MCPA butoxyethyl ester	MCPA methyl ester
MCPB methyl ester	Mecarbam	Mepanipyrim	Mepronil	Metalaxyl	Metamitron

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Table 4 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)

Metconazole	Methacrifos	Methamidophos	Methidathion	Methoprene	Methoxychlor
Metolachlor	Metrafenone	Metribuzin	Mevinphos (Phosdrin)	Monocrotophos	Myclobutanil
Napropamide	Nitrofen	Orthophenylphenol (2-Phenylphenol)	Oxadiazon	Oxadixyl	Oxyfluorfen
Paclbutrazol	Parathion-ethyl	Parathion-methyl	Penconazole	Pendimethalin	Permethrin-cis
Permethrin-trans	Phenotrin	Phorat	Phosalone	Phosphamidon	Picolinafen
Picoxystrobin	Pirimiphos-methyl	Prochloraz	Procymidone	Profenofos	Propanil
Propargite	Propham	Propiconazole I	Propiconazole II	Propisochlor	Propyzamide
Proquinazid	Pyraflufen-ethyl	Pyrazophos	Pyrethrins (Pyrethrin I i Pyrethrin II)	Pyridaben	Pyridalyl
Pyriminobac-methyl	Pyrimethanil	Pyriproxyfen	Quinalphos	Quinoxyfen	Quintozene
Resmethrin I	Resmethrin II	Simazin	Spirodiclofen	Spiromesifen	Spiroxamine I
Spiroxamine II	Tau-Fluvalinate	Tebuconazole	Tebufenpyrad	Tecnazene	Tefluthrin
TEPP	Terbufos	Terbuthylazin	Tetraconazole	Tetradifon	Tolclofos-methyl
Triadimefon	Triadimenol	Triallate	Triazophos	Trifloxystrobin	Triflumizole
Trifluralin	Triticonazole	Vinclozolin			

Table 5 - List of analyzed pesticide residues (LFO 001) in the delivered sample with the determined concentrations <LOQ (limit of quantification)

1-Naphthylacetamide	3-Hydroxycarbofuran	Abamectin	Acephate	Acetamidiprid	Aldicarb
Aldicarb-sulfone	Aldicarb-sulfoxide	Amidosulfuron	Amitraz	Azoxystrobin	Barban
Benfuracarb	Benomyl	Bentazone	Butylate	Carbaryl	Carbendazim
Carbetamide	Carbofuran	Carbosulfan	Chlorantraniliprole	Chlorotoluron	Chloroxuron
Clofentezine	Clothianidin	Cyazofamid	Cycloate	Cycloxydim	Cymoxanil
Cyromazine	Demeton-S-methylsulphon	Desmedipham	Diethofencarb	Diflubenzuron	Dimethenamid
Dimethoate	Dinoseb	Dioxathion	Diuron	DNOC	Dodine
EPTC	Ethirimol	Ethofumesate	Fenhexamid	Fenoxycarb	Fenpyroximate
Flazasulfuron	Flonicamid	Florasulam	Fluazinam	Fludioxonil	Flufenoxuron
Fluometuron	Fluopicolide	Fluopyram	Fluoxastrobin	Flurtamone	Fomesafen
Formetanat	Fosthiazate	Fuberidazole	Furathiocarb	Imidacloprid	Indoxacarb
Iprovalicarb	Isoprotruron	Isoxaben	Lenacil	Linuron	Lufenuron
Mandipropamid	Metaflumizone	Metazachlor	Methabenzthiazuron	Methiocarb	Methiocarb-sulfone
Methiocarb-sulfoxide	Methomyl	Methoxyfenozide	Metosulam	Metsulfuron-methyl	Monolinuron
Monuron	Novaluron	Omethoate	Oryzalin	Oxamyl	Oxycarboxin
Oxydemeton-methyl (Demeton-S-methyl sulfoxide)	Phenmedipham	Phosmet	Phoxim	Pirimicarb	Propachlor
Propamocarb	Propoxur	Prosulfocarb	Prosulfuron	Pymetrozin	Pyraclostrobin
Pyridate	Rotenone	Spinetoram	Spinosad (Spynosyn A i Spynosyn D)	Spirotetramat	Spirotetramat cis enol
Spirotetramat enol glucoside	Spirotetramat keto hydroxy	Spirotetramat monohydroxy	Sulcotrione	Sulfosulfuron	Tebufenozide
Teflubenzuron	Tepraloxymid	Thiabendazole	Thiacloprid	Thiametoxam	Thifensulfuron-methyl
Thiodicarb	Thiophanat-methyl	Tolyfluanid	Triasulfuron	Tribenuron-methyl	Trichlorfon
Tricyclazole	Tridemorph	Trifluzuron	Zoxamide		

¹⁵⁹JRC Compendium of reference methods for GMO analysis

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