



TEST REPORT NO 412908/22/POZ

Client Wielkopolskie Przedsiębiorstwo Przemysłu Ziemniaczanego S.A. Armii Poznań 49 62-030 Luboń		Sample (according to declaration of Client) Sample description: Potato protein LU-1434 Batch: 02 Production date: 08.09.2022 Expiry date: 07.03.2024
Sample reception date:	16.09.2022	Sample status: no objections Sample received from the Client
Start of analysis	19.09.2022	
End of analysis	26.09.2022	
Test report date	26.09.2022	

Test Method	Unit	Result
* Presence of Salmonella spp. in 25 g PN-EN ISO 6579-1:2017-04; PN-EN ISO 6579-1:2017-04/A1:2020-09	in 25 g	Not detected
* Number of yeasts and moulds at 25°C PN-ISO 21527-2:2009 (withdrawn)		
Number of yeasts and moulds	cfu/g	<1,0x10 ¹
Number of yeasts	cfu/g	<1,0x10 ¹
Number of moulds	cfu/g	<1,0x10 ¹
* Content of elements PN-EN 15763:2010		
Lead (Pb)	mg/kg	0,024
Arsenic (As)	mg/kg	0,018
Cadmium (Cd)	mg/kg	0,30
Mercury (Hg)	mg/kg	0,0074
Fluorine AOAC 975.08:1975	mg/kg	<5
* Pesticides - SCR1 - ed. VI of 08.06.2020 ^{1) 2) 4)} LMBG-00.00-34:1999 (DFG S19) except section E9		
Analysed pesticides	mg/kg	below quantification limit
* Dioxins/ Furans/ Dioxin-like PCBs/ Indicator PCBs ²⁾ PB-408 ed. III of 04.10.2021		
2,3,7,8-TCDD	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,7,8-PeCDD	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,4,7,8-HxCDD	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,6,7,8-HxCDD	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,7,8,9-HxCDD	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,4,6,7,8-HpCDD	ng/kg	< 0,05 (0,05 ± 0,01)
OCDD	ng/kg	< 0,10 (0,10 ± 0,02)



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2,3,7,8-TCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,7,8-PeCDF	ng/kg	< 0,05 (0,05 ± 0,01)
2,3,4,7,8-PeCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,4,7,8-HxCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,6,7,8-HxCDF	ng/kg	< 0,05 (0,05 ± 0,01)
2,3,4,6,7,8-HxCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,7,8,9-HxCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,4,6,7,8-HpCDF	ng/kg	< 0,05 (0,05 ± 0,01)
1,2,3,4,7,8,9-HpCDF	ng/kg	< 0,05 (0,05 ± 0,01)
OCDF	ng/kg	< 0,10 (0,10 ± 0,02)
WHO-PCDD/F-TEQ lower-bound ³⁾	ng/kg	0,000
WHO-PCDD/F-TEQ medium-bound ³⁾	ng/kg	0,076
WHO-PCDD/F-TEQ upper-bound ³⁾	ng/kg	0,153
PCB-081	ng/kg	< 0,05 (0,05 ± 0,01)
PCB-077	ng/kg	< 0,05 (0,05 ± 0,01)
PCB-126	ng/kg	0,063
PCB-169	ng/kg	< 0,05 (0,05 ± 0,01)
PCB-123	ng/kg	< 10 (10 ± 2)
PCB-118	ng/kg	< 10 (10 ± 2)
PCB-114	ng/kg	< 10 (10 ± 2)
PCB-105	ng/kg	< 10 (10 ± 2)
PCB-167	ng/kg	< 10 (10 ± 2)
PCB-156	ng/kg	< 10 (10 ± 2)
PCB-157	ng/kg	< 10 (10 ± 2)
PCB-189	ng/kg	< 10 (10 ± 2)
WHO-dl-PCB-TEQ lower-bound ³⁾	ng/kg	0,006
WHO-dl-PCB-TEQ medium-bound ³⁾	ng/kg	0,008
WHO-dl-PCB-TEQ upper-bound ³⁾	ng/kg	0,010
WHO-PCDD/F-PCB-TEQ lower-bound ³⁾	ng/kg	0,006
WHO-PCDD/F-PCB-TEQ medium-bound ³⁾	ng/kg	0,084
WHO-PCDD/F-PCB-TEQ upper-bound ³⁾	ng/kg	0,163
PCB-028	µg/kg	< 0,10 (0,10 ± 0,02)
PCB-052	µg/kg	< 0,10 (0,10 ± 0,02)
PCB-101	µg/kg	< 0,10 (0,10 ± 0,02)
PCB-153	µg/kg	< 0,10 (0,10 ± 0,02)
PCB-138	µg/kg	< 0,10 (0,10 ± 0,02)
PCB-180	µg/kg	< 0,10 (0,10 ± 0,02)
Sum of ndl-PCB (ICES-6) lower-bound ³⁾	µg/kg	0,00
Sum of ndl-PCB (ICES-6) medium-bound ³⁾	µg/kg	0,29
Sum of ndl-PCB (ICES-6) upper-bound ³⁾	µg/kg	0,58



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* Moisture Commission Regulation (EU) 152/2009, Annex III, p. A	%	9,1
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- 1) List of analysed pesticides with limit of quantifications is given in Enclosure SCR1 ed. VI of 08.06.2020.
- 2) The lower limit of the measuring range of the accredited method, which is also the limit of quantification set by the Laboratory.
- 3) The result was calculated for a sample with a moisture content of 12%.
- 4) The measurement uncertainty is $\pm 50\%$, according to SANTE/11312/2021.

Authorized by:

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The test report bears the certified electronic seal of J.S. Hamilton Poland Sp. z o.o.

Laboratory address:

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Pesticides - SCR1 - ed. VI of 08.06.2020

No.	Compound	Range [mg/kg]	No.	Compound	Range [mg/kg]	No.	Compound	Range [mg/kg]
1	Aldrin	0,005-0,5	33	Endosulfan alpha isomer	0,01-50	65	Methacrifos	0,01-0,5
2	Aldrin and dieldrin combined expressed as dieldrin	0,005-0,5	34	Endosulfan beta isomer	0,01-50	66	Methamidophos	0,01-10
3	Azinphos-ethyl	0,01-0,5	35	Endosulfan sulphate	0,01-50	67	Methidathion	0,01-1
4	Azinphos-methyl	0,01-2	36	Endrin	0,005-1	68	Methoxychlor	0,005-1
5	Bifenthrin (sum of isomers)	0,01-20	37	Ethion	0,005-5	69	Metolachlor	0,01-1
6	Bromophos (-methyl)	0,005-4	38	Etrimpfos	0,005-1	70	Metribuzin	0,005-1
7	Bromophos-ethyl	0,01-0,5	39	Fenchlorphos	0,005-0,5	71	Mevinphos (sum of isomers)	0,01-1
8	Captan	0,01-5	40	Fenitrothion	0,005-4	72	Mirex	0,005-1
9	Carbophenothion	0,01-1	41	Fenson	0,005-1	73	Myclobutanil (sum of isomers)	0,01-5
10	Chlordane (sum of cis- and trans-chlordane)	0,005-0,5	42	Fensulfothion	0,01-1	74	Nuarimol	0,01-1
11	Chlordane, cis	0,005-0,5	43	Fenthion	0,01-2	75	Omethoate	0,01-1
12	Chlordane, trans	0,005-0,5	44	Fenvalerate (sum of isomers)	0,01-0,5	76	Oxychlordane (Octachlorepoxyde)	0,005-0,5
13	Chlorfenson	0,5-0,5	45	Fluvalinate-tau	0,01-1	77	Paraoxon-methyl	0,01-1
14	Chlorfenvinphos	0,01-2	46	Folpet	0,01-20	78	Parathion	0,01-1
15	Chlorothalonil	0,005-20	47	Fonophos	0,005-0,5	79	Parathion-methyl	0,005-1
16	Chlorpyrifos	0,005-5	48	HCH alpha isomer	0,005-1	80	Parathion-methyl (sum of parathion-methyl and paraoxon-methyl expressed as parathion-methyl)	0,005-1
17	Chlorpyrifos-methyl	0,005-2	49	HCH beta isomer	0,005-1	81	Penconazole (sum of isomers)	0,01-1
18	Cypermethrin (sum of isomers)	0,02-50	50	HCH delta isomer	0,005-1	82	Pentachloroaniline	0,005-1
19	DDD-o,p'	0,005-2	51	Heptachlor	0,005-1	83	Permethrin (sum of isomers)	0,01-0,5
20	DDD-p,p'	0,005-2	52	Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)	0,005-1	84	Phenthoate	0,01-1
21	DDE-o,p'	0,005-2	53	Heptachlor epoxide, cis	0,005-1	85	Phorate	0,01-0,5
22	DDE-p,p'	0,005-2	54	Heptachlor epoxide, trans	0,005-1	86	Phosalone	0,005-4
23	DDT (sum of p,p'-DDT, o,p'-DDT, p,p'-DDE and p,p'-TDE (DDD) expressed as DDT)	0,005-2	55	Heptenophos	0,005-1	87	Phosmet	0,005-0,5
24	DDT-o,p'	0,005-2	56	Hexachlorobenzene (HCB)	0,005-0,5	88	Phosphamidon (sum of isomers)	0,01-1
25	DDT-p,p'	0,005-2	57	Isodrin	0,005-1	89	Pirimicarb	0,01-2
26	Diazinon	0,01-2	58	Isofenphos (-ethyl)	0,005-0,5	90	Pirimiphos-ethyl	0,005-4
27	Dichlofenthion	0,01-1	59	Lindane (HCH gamma isomer)	0,005-1	91	Pirimiphos-methyl	0,005-4
28	Dichlofluanid	0,005-10	60	Malaoxon	0,01-1	92	Procymidone	0,01-20
29	Dichlorvos (DDVP)	0,01-0,5	61	Malathion	0,005-10	93	Profenophos	0,01-10
30	Dicofol (sum of isomers)	0,01-4	62	Malathion (sum of malathion and malaoxon expressed as malathion)	0,005-1	94	Propachlor	0,02-0,5
31	Dieldrin	0,005-1,5	63	Mecarbam	0,01-0,5	95	Propetamphos	0,01-1
32	Endosulfan (sum of alpha- and beta- isomers and endosulfan-sulphate expresses as endosulfan)	0,01-50	64	Metalaxyl and metalaxyl-M (sum of isomers)	0,01-20	96	Propiconazole (sum of isomers)	0,01-1

No.	Compound	Range [mg/kg]
97	Propyzamide	0,01-2
98	Pyrazophos	0,01-0,5
99	Pyridaphenthion	0,01-1
100	Quinalphos	0,01-0,5
101	Quintozene	0,01-1
102	Quintozene (sum of quintozene and pentachloro- aniline expressed as quintozene)	0,005-1
103	Simazine	0,01-1
104	Sulfotep	0,005-1
105	Tecnazene	0,01-0,5
106	Terbutylazine	0,01-0,5
107	Tetramethrin (sum of isomers)	0,01-1
108	Tetrasul	0,005-1
109	Thiometon	0,01-1
110	Trifluralin	0,005-1
111	Vinclozolin	0,005-20



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THE END OF THE REPORT

The results refer only to the samples received. When a measurement uncertainty is given, it is an expanded uncertainty estimated for a coverage factor $k=2$ at 95% confidence level and is not including sampling uncertainty, unless otherwise stated. When the conformity is stated J.S. Hamilton Poland Sp. z o.o. applies the simple acceptance decision rule in accordance with ILAC-G8:09/2019, unless otherwise reported. If the "result" column of the accredited method contains a record: "<" or ">", it means, that it is the test outcome directly related to the lower or upper limit of the measuring range of the accredited method, whereas the given expanded measurement uncertainty relates only to the lower or upper limit of the measuring range of the accredited method respectively. In such a case, the Laboratory presents the opinion and interpretation in the "statement of conformity" column, which is based on the obtained test outcome. This test report may not be copied in part without the prior written permission of J.S. Hamilton Poland Sp. z o.o. The responsibility of J.S. Hamilton Poland Sp. z o.o. is limited solely to the data issued in its original. J.S. Hamilton Poland Sp. z o.o. does not permit the use of the PCA accreditation symbol AB 079 by customers, subcontractors, external service providers and other third parties. For further information please refer to the PCA document - DA-02. The service confirmed by this report is subject to the General Terms and Conditions of Services of J.S. Hamilton Poland Sp. z o.o. published on www.hamilton.com.pl.

* Test method accredited

Test performed by external provider