

## FINAL CERTIFICATE OF ANALYSIS

COA N° : 2627821-0  
 Supersedes CoA #: 2624591-0  
 COA date : 16/06/2025  
 Page : 1/5

Customer : PL\_MCHRZAN-1  
 Project N° : PL\_MCHRZAN-1\_WAW\_25\_00001  
 Order N° : 107

Analyzed by: Silliker Polska Sp. z o.o. (except where →)

Waryńskiego 1  
 00-645 Warszawa  
 Tel : +48 592 47 11  
 E-mail : dok@mxns.com



AB 462



To: M7 Maciej Chrzanowski  
 ul. Cieszyńska 47B  
 93-554  
 POLAND

## SAMPLE DESCRIPTION

Label ID : PL-00072376

CHEMISTRY SAMPLE No : 8738020

Commercial name : PRÓBKA NR 1

Sampling Date: 07/05/2025 14:00

Arrival Date:

07/05/2025 17:00

Sampling Type: Sampled by the customer

Sampling Method:

plan/method not available

Sampling Location: Wojsławice 103A, 98-220 Zduńska Wola

Sample Condition:

good, without objections

Additional information: Rukiew Polska

## ANALYTICAL RESULTS

## CHEMISTRY RESULTS

Tests	Results [±Uncertainty]	Units	Limits [Target value]	LOQ
<input checked="" type="checkbox"/> <b>Sum of sugars</b> PB-45 / LCH ed. 5 of 14.02.2024 → 12/05/2025				
Fructose	< 0.5	g/100g	-	0.5
Glucose	< 0.5	g/100g	-	0.5
Saccharose	< 0.5	g/100g	-	0.5
Maltose	< 0.5	g/100g	-	0.5
Lactose	< 0.5	g/100g	-	0.5
Sum of total sugars	< 0.5	g/100g	-	0.5
<input checked="" type="checkbox"/> <b>Moisture</b> PN-ISO 1026:2000 → 08/05/2025	95.0 [±1.2]	g/100g	-	1
<input checked="" type="checkbox"/> <b>Dry matter</b> PN-ISO 1026:2000	5.0 [±1.2]	g/100g	-	-
<input checked="" type="checkbox"/> <b>Fat</b> PN-A-79011-4:1998 → 09/05/2025	< 0.1	g/100g	-	0.1
<input checked="" type="checkbox"/> <b>Carbohydrates (calculated)</b> Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011	0.3	g/100g	-	-
<input checked="" type="checkbox"/> <b>Nitrogen</b> PB-39/LCH ed.3 date 30.09.2016 → 12/05/2025	0.291 [±0.022]	g/100g	-	0.01
<input checked="" type="checkbox"/> <b>Total ash</b> PN-EN 1135:1999 (withdrawn standard) → 12/05/2025	0.96 [±0.13]	g/100g	-	0.5
<input checked="" type="checkbox"/> <b>Protein (N*6,25)</b> PB-39/LCH ed.3 date 30.09.2016 (from calculations)	1.82 [±0.13]	g/100g	-	0.06
<input checked="" type="checkbox"/> <b>Nutritional energetic value</b> Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011				
Nutritional energetic value	12	kcal/100g	-	-

## FINAL CERTIFICATE OF ANALYSIS

COA N° : 2627821-0  
 Supersedes CoA #: 2624591-0  
 COA date : 16/06/2025  
 Page 2/5



AB 462

## CHEMISTRY RESULTS

Tests	Results [±Uncertainty]	Units	Limits [Target value]	LOQ
Nutritional energetic value	51	kJ/100g	-	-
<input checked="" type="checkbox"/> <b>Calculated salts (Na x 2,5)</b> Calculated	0.020 [±0.001]	%	-	-
<input checked="" type="checkbox"/> <b>Fatty acids profile</b> PB-24/LCH ed. 6 of 28.10.2024 ↻ 13/05/2025				
C4:0 Butyric acid	< 0.01	% in fat	-	0.01
C6:0 Caproic acid	< 0.01	% in fat	-	0.01
C8:0 Caprylic acid	< 0.01	% in fat	-	0.01
C10:0 Capric acid	1.66	% in fat	-	0.01
C12:0 Lauric acid	7.16	% in fat	-	0.01
C13:0 Tridecylic acid	< 0.01	% in fat	-	0.01
C14:0 Myristic acid	5.04	% in fat	-	0.01
C14:1 (cis-9) Myristoleic acid (ω-5)	< 0.01	% in fat	-	0.01
C15:0 Pentadecylic acid	< 0.01	% in fat	-	0.01
C15:1 (cis-10) Pentadecenoic acid (ω-5)	< 0.01	% in fat	-	0.01
C16:0 Palmitic acid	19.53	% in fat	-	0.01
C16:1 (cis-9) Palmitoleic acid (ω-7)	< 0.01	% in fat	-	0.01
C17:0 Margaric acid	< 0.01	% in fat	-	0.01
C17:1 (cis-10) Heptadecenoic acid (ω-8)	< 0.01	% in fat	-	0.01
C18:0 Stearic acid	2.73	% in fat	-	0.01
C18:1 (trans-9) Elaidic acid (ω-9)	< 0.01	% in fat	-	0.01
C18:1 (cis-9) Oleic acid (ω-9)	24.68	% in fat	-	0.01
C18:1 (cis-11) Vaccenic acid (ω-7)	2.93	% in fat	-	0.01
C 18:1 (cis-9, 12-OH) Ricinoleic acid (ω-9)	< 0.01	% in fat	-	0.01
C18:2 (trans, trans-9, 12) Linoleaidic acid (ω-3)	< 0.01	% in fat	-	0.01
C18:2 (cis, cis-9, 12) Linoleic acid (LA) (ω-6)	17.37	% in fat	-	0.01
C18:3 (cis,cis,cis-9, 12, 15) α-linolenic acid (ALA) (ω-3)	17.45	% in fat	-	0.01
C18:3 (cis,cis,cis-6, 9, 12) γ-linolenic acid (ω-6)	< 0.01	% in fat	-	0.01
C20:0 Arachidic acid	< 0.01	% in fat	-	0.01
C20:1 (cis-11) Gadoleic acid (ω-9)	< 0.01	% in fat	-	0.01
C20:2 (cis,cis-11, 14) Eicosadienoic acid (ω-6)	< 0.01	% in fat	-	0.01
C20:3(cis,cis,cis-11, 14, 17)Eicosatrienoic acid (ω-3)	< 0.01	% in fat	-	0.01
C20:4 (cis,cis,cis,cis-5, 8, 11, 14) Arachidonic acid (ω-6)	< 0.01	% in fat	-	0.01
C20:5 Eicosapentaenoic acid (EPA) (ω-3)	< 0.01	% in fat	-	0.01
C22:0 Behenic acid	< 0.01	% in fat	-	0.01
C22:1 (cis-13) Erucic acid (ω-9)	< 0.01	% in fat	-	0.01
C22:4 (cis, cis, cis, cis-7, 10, 13, 16) Docosotetranoic acid (ω-6)	< 0.01	% in fat	-	0.01
C22:6 Docosahexaenoic acid (DHA) (ω-3)	< 0.01	% in fat	-	0.01
C23:0 Tricosanoic acid	< 0.01	% in fat	-	0.01
C24:0 Lignoceric acid	1.45	% in fat	-	0.01

## FINAL CERTIFICATE OF ANALYSIS

COA N° :	2627821-0
Supersedes CoA #:	2624591-0
COA date :	16/06/2025
Page	3/5



AB 462

## CHEMISTRY RESULTS

Tests	Results [±Uncertainty]	Units	Limits [Target value]	LOQ
C24:1 (cis-15) Nervonic acid (ω-9)	< 0.01	% in fat	-	0.01
Saturated fatty acids	< 0.01	g/100g	-	0.01
Total trans fatty acids in fat	< 0.01	% in fat	-	0.01
Trans fatty acids	< 0.01	g/100g	-	0.01
Monounsaturated fatty acids	< 0.01	g/100g	-	0.01
Polyunsaturated fatty acids	< 0.01	g/100g	-	0.01
Omega 3 fatty acids	< 0.01	g/100g	-	0.01
Omega 6 fatty acids	< 0.01	g/100g	-	0.01
Omega 9 fatty acids	< 0.01	g/100g	-	0.01
☑ <b>Total Dietary Fiber (TDF)</b> AOAC 991.43:1994	1.97 [±0.30]	g/100g	-	0.30
☑ <b>Na</b> PB-38/LCH ed. 5 of 12.04.2024	0.008 [±0.001]	g/100g	-	0.001
☑ <b>Ca</b> PB-38/LCH ed. 5 of 12.04.2024	923.8 [±231.0]	mg/kg	-	1
☑ <b>Fosfor</b> PB-38/LCH ed. 5 of 12.04.2024	479 [±86]	mg/kg	-	100
☑ <b>Mg</b> PB-38/LCH ed. 5 of 12.04.2024	163.1 [±17.9]	mg/kg	-	1
☑ <b>K</b> PB-38/LCH ed. 5 of 12.04.2024	3394.8 [±373.4]	mg/kg	-	10
☑ <b>Manganese</b> PB-56/LCH ed. 1 of 05.09.2023	8.6 [±1.6]	mg/kg	-	0.05
☑ <b>Iron</b> PB-56/LCH ed. 1 of 05.09.2023	10.1 [±2.2]	mg/kg	-	0.5
☑ <b>Copper</b> PB-56/LCH ed. 1 of 05.09.2023	< 0.5	mg/kg	-	0.5
☑ <b>Zinc</b> PB-56/LCH ed. 1 of 05.09.2023	5.8 [±1.3]	mg/kg	-	0.5
☑ <b>Selenium</b> PB-56/LCH ed. 1 of 05.09.2023	< 0.05	mg/kg	-	0.05
☑ <b>Vitamin A</b> → Chelab Resana/MP 2597 REV 1 2024 (UNI EN 12823-1:2014)	< 0.050	mg/100g	-	-
☑ <b>Vitamin B1 (Thiamine)</b> → Chelab Resana/MP 2327 rev 5 2024 (AOAC 2015.14)	0.87 [±0.18]	mg/kg	-	-
☑ <b>Vitamin B5 (pantothenic acid)</b> → Chelab Resana/MP 2327 REV 5 2024	5.7 [±1.2]	mg/kg	-	-

## FINAL CERTIFICATE OF ANALYSIS

COA N° :	2627821-0
Supersedes CoA #:	2624591-0
COA date :	16/06/2025
Page	4/5



AB 462



## CHEMISTRY RESULTS

Tests	Results [±Uncertainty]	Units	Limits [Target value]	LOQ
<b>Vitamin B9 (folates)</b>				
→ Chelab Resana/MP 2346 REV 5 2024 (AOAC 2011.06)				
Vitamin B9 (Folic acid)	23.1 [±7.2]	µg/100g	-	-
5-METHYL-TETRAHYDROFOLIC ACID	24,0 [±7.4]	µg/100g	-	-
5-FORMYL-TETRAHYDROFOLIC ACID	<4,0	µg/100g	-	-
<input checked="" type="checkbox"/> <b>Vitamin B12 (Cyanocobalamin)</b>	0.259 [±0.077]	µg/100g	-	-
→ Chelab Resana/MP 2347 REV 3 2022 (AOAC 2014.02)				
<input checked="" type="checkbox"/> <b>Vitamin E</b>	2.79 [±0.61]	mg/kg	-	-
→ Chelab Resana/MP 2597 rev 1 2024 (BS EN 17547:2021)				
<input checked="" type="checkbox"/> <b>Vitamin K1</b>	476 [±105]	µg/kg	-	-
→ Chelab Resana/PNTA0178				
<input checked="" type="checkbox"/> <b>Vitamin B2 (Riboflavin)</b>	0.126 [±0.026]	mg/100g	-	-
→ Chelab Resana/MP 2327 rev 5 2024 (AOAC 2015.14)				
<input checked="" type="checkbox"/> <b>Vitamin B6</b>	0.87 [±0.18]	mg/kg	-	-
→ Chelab Resana/MP 2327 REV 5 2024 (AOAC 2015.14)				
<input checked="" type="checkbox"/> <b>Pesticides MULTIRESIDUAL STD-PO around 687 molecules</b>	according to the attached test report No. 25/000368648 dated 09.06.2025.	-	-	-
→ Chelab Resana/MP 2369 rev 4 2023 (UNI EN 15662) + MP 2370 rev 4 2023 (UNI EN 15662) + MP 2368 rev 4 2023 (UNI EN 15662)				

**Comments:** Subcontractor accreditation number Chelab Resana - LAB N° 0051 L.

The reference document has been modified.

**CONCLUSION:** The pesticide results are in accordance with Regulation (EC) No. 396/2005 of the European Parliament and of the Council of February 23, 2005 on maximum residue levels of pesticides in and on food and feed of plant and animal origin, amending Council Directive 91/414/EEC (pt 8 SE).

## FINAL CERTIFICATE OF ANALYSIS

COA N° :	2627821-0
Supersedes CoA #:	2624591-0
COA date :	16/06/2025
Page	5/5



AB 462



<input checked="" type="checkbox"/> Accredited	<input checked="" type="checkbox"/> Confirmed	<input type="checkbox"/> Retested	<b>LOD</b> Limit of Detection	<b>NC</b> Non compliant
<input checked="" type="checkbox"/> Subcontracted	<input checked="" type="checkbox"/> Date started	<b>N/A</b> Not Applicable	<b>LOQ</b> Limit of Quantitation	
<b>est.</b> Estimated	<input checked="" type="checkbox"/> Date completed	<b>ND</b> Not Detected	<b>C</b> Compliant	<b>MRL</b> Maximum Residue Limit

## General remarks:

- 1) Non Compliant result (NC) without taking into account the uncertainty.
- 2) Planned deadline for submitting comments: 14 days from the date of sending the Test Report.
- 3) Test results refer only to the tested sample(s).
- 4) In the case of samples taken by the Customer, the test results refer to the samples received.
- 5) This Report may not be reproduced in part without the written consent of the Laboratory.
- 6) The expanded uncertainty of the result with a confidence level of approx. 95% and coverage factor k=2, does not take into account sampling (except for microbiological tests of water, air, swabs and dipslides, and physicochemical tests of water).
- 7) The information about the sample description presented in italics is the information provided by the Customer.
- 8) When presenting statements of conformity with limits, the laboratory applies the decision rule of simple acceptance according to ILAC-G8:09/2019 in the case of legal parameters, except when the decision rule is defined by the Customer's requirements/specifications or normative documents. Decision rules when determining conformity: IL - simple acceptance according to ILAC-G8:09/2019; SE - according to the SANTE document (regarding pesticides); TX - according to Commission Implementing Regulation (EU) 2023/2782 (regarding mycotoxins); KL - provided by the Customer.
- 9) Withdrawn standard - replaced by another standard or withdrawn without replacement, verified in the laboratory, appropriate for testing the parameter.

Results validated on 16/06/2025

Agata Kwiatkowska

by Agata Kwiatkowska  
Senior Research Specialist

End of report