

NEW CHEMICAL SYNTHESIS INSTITUTE

RESEARCH LABORATORY

Al. Tysiąclecia Państwa Polskiego 13 A, 24-110 PUŁAWY

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Puławy, 06.02.2017

LABORATORY TEST REPORT no. 103/2016/Inne

1. Name of sample: ECO-PLON VOLCANIC MINERALS
2. Name and address of the customer: AINEG-POL
SERVICE, TRADE AND PRODUCTION COMPANY
Genowefa Laskowska
Wawrzonkowo 21A
87-620 Kikół
3. Sampling: Ordering party
4. Date of receipt of the sample: 04.08.2016
Start date of the test: 05.08.2016
End date of the test: 11.12.2016
5. Description and identification of the sample: Mineral agent supporting plant cultivation. Solid, powdery, brown sample. The sample delivered for the test in polythene packaging locked with seal A624142, in quantity of about 5 kg. The sample was taken by authorized sampler Alicja Gregorczyk-Jędrzejewska from Local Chemical-Agricultural Station in Gliwice, ul. Józefa Sowińskiego 26, 44-100 Gliwice on 27.07.2016, in accordance with Protocol of sample taking no. 2/C/2016. The sample was given the identification number 103/2016/Inne.
6. Sample usefulness: Satisfactory
7. Testing methods:

Id		Test Method	Procedure
1.	Arsenic (As)	atomic emission spectrometry with inductively coupled plasma	INS method
2.	Cadmium (Cd)		INS method
3.	Lead (Pb)		INS method
4.	Mercury (Hg)		INS method
5.	pH value	potentiometry	PN-89/C-04963
6.	Value of electric conductivity EC in 25°C	conductometric	INS method
7.	Granulation	weight	PN-EN 1235:1999_A1:2004

8.	SiO ₂	FX-Raw professional Fluxana WDXRF	INS method		
9.	Al ₂ O ₃				
10.	Fe ₂ O ₃				
11.	CaO				
12.	Na ₂ O				
13.	MgO				
14.	K ₂ O				
15.	TiO ₂				
16.	P ₂ O ₅				
17.	Mn ₂ O ₃				
18.	BaO				
19.	SO ₃				
20.	SrO				
21.	CuO				
22.	ZnO				
23.	PbO				
24.	NiO				
25.	HFO ₂				
26.	Cr ₂ O ₃				
27.	Loss on ignition			wight	INS method

8. Test range consistent with: order dated
29.07.2016

9. Test results:

Id	Identification number of the sample	103/2016/Inne
	Examined feature [unit]	Test results
1.	Arsenic (As) content [mg/kg]	7,78
2.	Cadmium (Cd) content [mg/kg]	under 1,0
3.	Lead (Pb) content [mg/kg]	33,5
4.	Mercury (Hg) content [mg/kg]	0,006
5.	pH value (10% aqueous extract)	9,4
6.	Value of electric conductivity EC in 25°C (10% aqueous extract) [µS/cm]	87,4
7.	Granulation Sieved through a sieve 0,063 mm [%]	83,9
8.	SiO ₂ [%]	53,00
9.	Al ₂ O ₃ [%]	14,61
10.	Fe ₂ O ₃ [%]	9,45
11.	CaO [%]	5,63
12.	Na ₂ O [%]	3,40
13.	MgO [%]	3,30
14.	K ₂ O [%]	2,82
15.	TiO ₂ [%]	1,33
16.	P ₂ O ₅ [%]	0,67
17.	Mn ₂ O ₃ [%]	0,22
18.	BaO [%]	0,16
19.	SO ₃ [%]	0,09
20.	SrO [%]	0,05

21.	CuO [%]	0,04
22.	ZnO [%]	0,02
23.	PbO [%]	0,01
24.	NiO [%]	0,007
25.	HFO ₂ [%]	0,005
26.	Cr ₂ O ₃ [%]	0,002
27.	Loss on ignition [%]	6,78

10. **It is declared**, that these results relate exclusively to the test sample with identification number 103/2016/Inne and that without the written consent of Head of Laboratory, the *Laboratory test report* cannot be reproduced except as a whole.

11. The ordering party is entitled to a 14-day compliant period.

12. Comments: none.

Authorised by

MANAGER OF CHEMICAL COMPOSITION

SECTION

Agnieszka Laskowska

06.02.2017

Head of NLB

HEAD OF FERTILIZER TESTING LABORATORY

OF NEW CHEMICAL SYNTHESIS INSTITUTE

Dr. Anna Witros

06.02.2017