



**E K O C E N T R U M   O V A L A B, s.r.o.**  
 Test Laboratory No. 1162 Accredited by Czech Accreditation Institute p.s.c.  
 Martinovská 3248/166, 723 08 Ostrava - Martinov  
 tel. +420 596 963 791, tel./fax. +420 596 963 788  
 e-mail: ekocentrum@wo.cz, www.ekocentrum.net

**TEST REPORT No. P 86**

Pages : 1 / 3

**OWNER SAMPLE :** Heaven Labs s.r.o.

P átelství 172/42  
 104 00 Praha 10 - Uh ín ves

Order: 42/P  
 Sample: by the owner  
 Delivered: by post  
 Payment: paid by the owner  
 Received on: 4.1.2016 Analysis completion on: 21.1.2016

Required investigation: chemical

<b>List of samples</b>	
<b>Sample No.</b>	<b>Identification and description of the sample</b>
P 86	Oat fiber

**Results of investigation**

<b>Chemical analysis:</b> responsible Ing. Hana Pavelková		<b>P 86</b>	
<b>Parameter</b>	<b>Unit</b>	<b>Value</b>	<b>±n.%</b>
Afla B1B2G1G2	mg/kg	<0,002	
Protein content	%	23,2	±2,2%
Sugar (invert)	%	3,58	±3,1%
Fatty acids monounsaturated	g/100g fat	44,86	±2,2%
Fatty acids saturated	g/100g fat	18,87	±2,2%
Fatty acids polyunsaturated	g/100g fat	36,28	±2,2%
Saccharides	%	23,4	
Starch	%	19,8	±3%
Fat content	%	4,86	±3%
Total dietary fibre	%	44,75	±2,2%

<b>Inorganic constituents:</b> responsible Ing. Ji í Pavelka, CSc.		<b>P 86</b>	
<b>Parameter</b>	<b>Unit</b>	<b>Value</b>	<b>±n.%</b>
Arsenic (As)	mg/kg	0,006	±32%
Calcium (Ca)	mg/kg	1390	±8%
Cadmium (Cd)	mg/kg	0,05	±13%
Chromium (Cr)	mg/kg	0,150	±13%
Copper (Cu)	mg/kg	7,90	±8%
Iron (Fe)	mg/kg	92,8	±8%
Mercury (Hg)	mg/kg	0,0013	±52%
Potassium (K)	mg/kg	4200	±12%
Magnesium (Mg)	mg/kg	2520	±6%
Manganese (Mn)	mg/kg	114	±8%
Molybdenum (Mo)	mg/kg	2,00	±8%

<b>Inorganic constituents:</b> responsible Ing. Ji í Pavelka, CSc.		<b>P 86</b>	
<b>Parameter</b>	<b>Unit</b>	<b>Value</b>	<b>±n.%</b>
Sodium (Na)	mg/kg	<b>45,7</b>	±8%
Phosphorus (P)	mg/kg	<b>7990</b>	±8%
Lead (Pb)	mg/kg	<b>&lt;0,01</b>	
Sulphur (S)	mg/kg	<b>3480</b>	±16%
Selenium (Se)	mg/kg	<b>&lt;0,03</b>	
Zinc (Zn)	mg/kg	<b>64,3</b>	±6%

<b>Organic constituents:</b> responsible Ing. Ji í Pavelka		<b>P 86</b>	
<b>Parameter</b>	<b>Unit</b>	<b>Value</b>	<b>±n.%</b>
Biotin	µg/100 g	<b>4,93</b>	±12%
Gluten	mg/100g	<b>142</b>	±15%
Carotene-beta	mg/100g	<b>&lt;0,001</b>	
Xanthophyll	mg/100g	<b>0,008</b>	±20%
Lycopene	mg/100g	<b>&lt;0,001</b>	
Niacin	mg/100g	<b>0,448</b>	±15 %
Vitamin A (Retinol)	mg/100g	<b>&lt;0,010</b>	
Thiamine (Vit. B1)	mg/100g	<b>0,118</b>	±10%
Cobalamine (Vit. B12)	µg/100 g	<b>0,093</b>	±10 %
Vit B2, Riboflavin	mg/100g	<b>0,088</b>	±10%
Pantothenic Acid (Vit.B5)	mg/100g	<b>3,10</b>	±10%
Vit B6, Pyridoxin	mg/100g	<b>0,188</b>	±8%
Folic Acid (Vit.B9)	µg/100 g	<b>1,21</b>	±20 %
Vit E, alfa-Tokoferol	mg/100g	<b>0,319</b>	±10%
Vit K1, Fyllochinon	mg/100g	<b>&lt;0,005</b>	
Vit K2	mg/kg	<b>&lt;1</b>	
Zeaxanthin	mg/kg	<b>&lt;0,001</b>	

Remark: Uncertainty n = ± % of the result (uncertainty extension k=2, corresponding to a reliability level of about 95%)

- sampling uncertainty not included
- values marked \* mean absolute uncertainty in units of the result

Unless otherwise stated, the results are based on the original mass of the sample.

#### Required analytical methods

<b>Parameter</b>	<b>Accreditation</b>	<b>SOP</b>	<b>Clarification SOP (method)</b>
Sulphur (S)	N	<b>A-01</b>	OES-ICP (acids mineralization)
Molybdenum (Mo)	N	<b>A-01</b>	OES-ICP (acids mineralization)
Sodium (Na)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Magnesium (Mg)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Manganese (Mn)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Selenium (Se)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Zinc (Zn)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Phosphorus (P)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Lead (Pb)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Chromium (Cr)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Cadmium (Cd)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Calcium (Ca)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Copper (Cu)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Potassium (K)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Iron (Fe)	A	<b>A-01-1</b>	OES-ICP (acids mineralization)
Mercury (Hg)	A	<b>A-02-1</b>	AAS - AMA 254 Hg
Arsenic (As)	A	<b>A-03-1</b>	As and Se hydride generation
Protein content	A	<b>C-06</b>	SN ISO 1871
Fat content	A	<b>C-09-1</b>	Total fat - internal directive

**Required analytical methods**

Parameter	Accreditation	SOP	Clarification SOP (method)
Sugar (invert)	A	C-11	internal directive - Schoorl
Starch	A	C-34	internal directive - Ewers
Fatty acids polyunsaturated	A	C-75	GC/FID
Fatty acids saturated	A	C-75	GC/FID
Fatty acids monounsaturated	A	C-75	GC/FID
Afla B1B2G1G2	A	C-76	immunoaffinity chromatography
Total dietary fibre	A	C-83	Total dietary fibre TDF
Saccharides	N		calculation
Gluten	A	C-52	ELISA Ridascreen
Pantothenic Acid (Vit.B5)	A	C-97-5	Internal directive - HPLC/UV-VIS
Cobalamin (Vit. B12)	A	M-71-1	Determination B12 by microb. methods
Vitamin A (Retinol)	A	O-03	internal directive - HPLC/FLD
Vit E, alfa-Tokoferol	A	O-03	internal directive - HPLC/FLD
Vit B6, Pyridoxin	A	O-08	internal directive - HPLC/FLD
Vit B2, Riboflavin	A	O-08	internal directive - HPLC/FLD
Thiamine (Vit. B1)	A	O-08	internal directive - HPLC/FLD
Niacin	A	O-13	internal directive - HPLC/UV
Zeaxanthin	N		HPLC-UV-VIS
Carotene-beta	A	O-14	internal directive - HPLC-VIS
Lycopene	A	O-14	internal directive - HPLC-VIS
Xanthophyll	A	O-14	internal directive - HPLC-VIS
Biotin	A	O-17	Determination B7, B12 and Folid Acid by ELISA methods
Folic Acid (Vit.B9)	A	O-17	Determination B7, B12 and Folid Acid by ELISA methods
Vit K2	A	O-44	internal directive - HPLC-UV
Vit K1, Fyllochinon	A	O-44	internal directive - HPLC-UV

Accreditation : A - accredited method, N - non-accredited method, SA - sub-order accredited, F - flexible scope of accreditation

The results relate only to tested items. The report may not be reproduced except in whole without the written permission of the testing laboratory.

Report prepared by : Šimková Jana

Report approved by :

**Ing. Jiří Pavelka**  
**Head of Laboratory**

Ostrava, date : 20.4.2016