

Client:



21804180323
PA242783

MR. POLBEE Sp. z o.o.
woj. Mazowieckie
ul. Brukowa 3, Kamien
26800 Bialobrzegi
Poland

Our reference no.	: PI1804160217		
Product	: Honey		
Sample description / Batch	: Lot N° 5-2018 contract 17/PL from 12.09.2017		
Sample received on / transported by	: 16.04.2018 via Parcel service	Seal	: none
Sample temp. when received / stored	: RT	Sampling	: Client
Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 17.04.2018 / 18.04.2018

ANALYSIS REQUESTED: Chloramphenicol by LC-MS/MS (101024)

Parameter	Result	Unit	Method
Chloramphenicol	n.d.	µg/kg	PM DE01_022 (a) ¹
n.d. - not detected < limit of quantification 0.1 µg/kg MRPL (Minimum Required Performance limit) for chloramphenicol = 0.3 µg/kg according to 2003/181/EG dated March 13, 2003			
(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure This document may only be reproduced in full. The results given herein apply to the submitted sample only.			

Interpretation:

Regarding the examined parameter and with respect to the mentioned limit of quantification and the MRPL of 0.3 µg/kg the sample corresponds to the legal regulations (Regulation (EC) 470/2009 in conjunction with Regulation (EU) 37/2010 (dated Feb. 9th 2010)) and corresponds to the Decision 2003/181/EC dated March 13th, 2003 in connection with the Decision 2005/34/EC dated Jan. 11th, 2005.

Hauke Zinow
Responsible Scientist, Certified Food Chemist

Client:



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Poland

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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 17.04.2018 / 19.04.2018

ANALYSIS REQUESTED: Nitrofurane Metabolites by LC-MS/MS (101027)

Parameter	Result	Unit	Method
AOZ	n.d.	µg/kg	PM DE01_031 (a) ¹
AMAZ	n.d.	µg/kg	PM DE01_031 (a) ¹
AHD	n.d.	µg/kg	PM DE01_031 (a) ¹
SEM	n.d.	µg/kg	PM DE01_031 (a) ¹
n.d. - not detected < 0.2 µg/kg (AOZ, AMAZ), < 0.5 µg/kg (AHD, SEM) MRPL (Minimum Required Performance Limit) for nitrofurane metabolites = 1.0 µg/kg according to 2003/181/EG from March, 13, 2003			
(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure This document may only be reproduced in full. The results given herein apply to the submitted sample only.			

Interpretation:

Regarding the examined parameters, the mentioned limit of detection and the MRPL of 1 µg/kg the sample corresponds to the legal regulations (Regulation (EC) 470/2009 in conjunction with Regulation (EU) 37/2010 (dated Feb. 9th 2010)) and corresponds to the Decision 2003/181/EC dated March 13th, 2003 in connection with the Decision 2005/34/EC dated Jan. 11th, 2005.

Dr. Hartmut Wischmann
Responsible Scientist, Certified Food Chemist

Client:

21804190286
PA242783**MR. POLBEE Sp. z o.o.**
woj. Mazowieckie
ul. Brukowa 3, Kamien
26800 Bialobrzegi
Poland

Our reference no.	: PI1804160217		
Product	: Honey		
Sample description / Batch	: Lot N° 5-2018 contract 17/PL from 12.09.2017		
Sample received on / transported by	: 16.04.2018 via Parcel service	Seal	: none
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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 17.04.2018 / 19.04.2018

ANALYSIS REQUESTED: Metronidazole by LC-MS/MS (101089)

Parameter	Result	Unit	Method
Metronidazole	n.d.	µg/kg	PM DE01_101 (a) ¹
n.d. - not detected < 0.5 µg/kg limit of quantification			
(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure This document may only be reproduced in full. The results given herein apply to the submitted sample only.			

Interpretation:

Regarding the examined parameters and with respect to the mentioned limit of quantification the sample corresponds to the legal regulations (Regulation (EC) 470/2009 in conjunction with regulation (EU) 37/2010 (dated Feb. 9th 2010)).

Hauke Zinow
Responsible Scientist, Certified Food Chemist

Client:



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Sample received on / transported by	: 16.04.2018 via Parcel service	Seal	: none
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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 18.04.2018 / 20.04.2018

ANALYSIS REQUESTED: 13C Isotope Analysis by EA/LC (C4/C3-Sugars) (101158)

Parameter	Result	Unit	Method
Protein	-25.73	d13C(‰)	PM DE01_026 (a) ¹
Honey	-26.35	d13C(‰)	PM DE01_026 (a) ¹
Fructose (F)	-26.40	d13C(‰)	PM DE01_094 (a) ²
Glucose (G)	-26.87	d13C(‰)	PM DE01_094 (a) ²
Disaccharides	-26.39	d13C(‰)	PM DE01_094 (a) ²
Trisaccharides	n.a.	d13C(‰)	PM DE01_094 (a) ²
Oligosaccharides	n.a.	d13C(‰)	PM DE01_094 (a) ²
Delta d13C (F-G)	0.47	d13C(‰)	PM DE01_094 (a) ²
Delta d13C (max.)	0.68	d13C(‰)	PM DE01_094 (a) ²
C4 Sugar Content	1.50	%	PM DE01_026 (a) ¹
F/G Ratio	1.07		PM DE01_094 (a) ²
Portion of Disaccharides	3.01	%	PM DE01_094 (a) ³
Portion of Trisaccharides	n.d.	%	PM DE01_094 (a) ³
Portion of Oligosaccharides	n.d.	%	PM DE01_094 (a) ³

LC-IRMS is not an official method for F/G ratio; n.a.: not analyzed; n.d.: not detected < 0.7 %; d13C value in permil. vs. V-PDB standard

SPECIFICATIONS OF PURE HONEY:
 Delta d13C (F - G): not more than +/- 1 ‰
 Delta d13C (max.) of individual d13C values: not more than +/- 2.1 ‰
 C4 sugar content: < 7 %; portion of oligosaccharides: n.d.

(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) AOAC 998.12
 (2) Apidologie 39/5 (2008) 574-587 (3) Apidologie 39/5 (2008) 574-587; % related to total sugars.
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Interpretation:

The sample meets the specifications of pure honey. Foreign sugars were not detected.

Dr. Caroline Indorf
Responsible Scientist, Certified Food Chemist

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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 17.04.2018 / 20.04.2018

ANALYSIS REQUESTED: Sulfonamides and Trimethoprim by LC-MS/MS (101171)

Parameter	Result	Unit	Method
Sulfaguanidine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfanilamide	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfacetamide	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Succinylsulfathiazole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfaphenazole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfisomidine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfadiazine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfathiazole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfapyridine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamerazine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamethazine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamer	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamethoxyipyridazine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfachloropyridazine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamonomethoxine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfisoxazole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamethoxazole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfadoxine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfaquinoxaline	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfadimethoxine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfabenzamide	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamoxole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfaclozine	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfamethizole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Sulfisozole	n.d.	µg/kg	PM DE01_046/084 (a) ¹
Trimethoprim	n.d.	µg/kg	PM DE01_046/084 (a) ¹

n.d. - not detected < limit of quantification 5 µg/kg; n.a. - not analyzed

(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure
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21804200169
PA242783

Interpretation:

Regarding the examined parameters and the mentioned limit of quantification the sample corresponds to the legal regulations (regulation (EC) 470/2009 in conjunction with regulation (EU) 37/2010 (dated Feb. 9th 2010)).

Dr. Hartmut Wischmann
Responsible Scientist, Certified Food Chemist

Client:



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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 18.04.2018 / 19.04.2018

ANALYSIS REQUESTED: Tetracyclines by LC-MS/MS (101172)

Parameter	Result	Unit	Method
Oxytetracycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Tetracycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Chlortetracycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Doxycycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Demeclocycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Methacycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹
Minocycline	n.d.	µg/kg	PM DE01_060/116 (a) ¹

n.d. - not detected < limit of quantification 5 µg/kg

(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure
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Interpretation:

Regarding the examined parameters and the mentioned limit of quantification the sample corresponds to the legal regulations (regulation (EC) 470/2009 in conjunction with regulation (EU) 37/2010 (dated Feb. 9th 2010)). The results are stated as sum of the parent drug and the corresponding 4-Epimer.

Hauke Zinow
Responsible Scientist, Certified Food Chemist

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Sample temp. when received / stored	: RT	Sampling	: Client
Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 17.04.2018 / 19.04.2018

ANALYSIS REQUESTED: Streptomycin by LC-MS/MS (101173)

Parameter	Result	Unit	Method
Streptomycin	n.d.	µg/kg	PM DE01_104 (a) ¹
Dihydrostreptomycin	n.d.	µg/kg	PM DE01_104 (a) ¹
n.d. - not detected < 5 µg/kg limit of quantification			
(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure This document may only be reproduced in full. The results given herein apply to the submitted sample only.			

Interpretation:

Regarding the examined parameters and the mentioned limit of quantification the sample corresponds to the legal regulations (regulation (EC) 470/2009 in conjunction with regulation (EU) 37/2010 (dated Feb. 9th 2010)).

Hauke Zinow
 Responsible Scientist, Certified Food Chemist

Client:



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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 18.04.2018 / 20.04.2018

ANALYSIS REQUESTED: Commercial Analysis (101201)

Parameter	Result	Unit	Method
HMF	4.8	mg/kg	PM DE01_021 (a) ¹
Moisture content	17.1	%	PM DE01_029 (a) ²
pH	3.9	pH	PM DE01_042 (a) ³
Diastase	15.4	DZ	PM DE01_090 (a) ⁴
Free acid	17.3	mmol/kg	PM DE01_042 (a) ³
HMF: n.d. - not detectable < limit of quantification 0.1 mg/kg Diastase: n.d. - not detected < limit of quantification 0.1 DZ Free Acid: n.d. - not detectable < limit of quantification 0.1 mmol/kg			
(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) DIN 10751-3 mod. (2) ASU § 64 LFGB L 40.00-2 mod. (3) Inhouse procedure (4) Inhouse procedure This document may only be reproduced in full. The results given herein apply to the submitted sample only.			

Interpretation:

Regarding the examined parameters the sample corresponds to the legal regulations (Honey directive 2001/110/EC from Dec. 20th, 2001; Article 1 in connection with Annex II).

Tina Huth
 Responsible Scientist, Certified Food Chemist

Client:

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26800 Bialobrzegi
Poland

Our reference no.	: PI1804160217		
Product	: Honey		
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Packaging / Quantity	: Plastic container / ca. 500g	Start / End of analysis	: 19.04.2018 / 20.04.2018

ANALYSIS REQUESTED: Colour - Hanna (101337)

Parameter	Result	Unit	Method
Colour	36	mm Pfund	PM DE01_049 (a) ¹

(a) : accredited under terms of DIN EN ISO/IEC 17025. (na) : not accredited method. (1) Inhouse procedure
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Interpretation:

The Pfund Scale defines the following colour ranges:

0-8 mm: equivalent to "water white"

9-17 mm: equivalent to "extra white"

18-34 mm: equivalent to "white"

35-50 mm: equivalent to "extra light amber"

51-85 mm: equivalent to "light amber"

86-114 mm: equivalent to "amber"

115-200 mm: equivalent to "dark"

Tina Huth*Responsible Scientist, Certified Food Chemist*