

Quality Services International GmbH

Publicly Certified Experts for Trade Chemistry - Chamber of Commerce Bremen
Experts on Official Counter Samples by the State of Bremen



Member of Tentamus



Testreport

OSI GmbH - Flughafendamm 9a - D-28199 Bremen

dba Czech Honey Prokes
Ing. Daniel Prokes
Maxov 35
CZ-344 01 Domazlice
Czech Republic

Printed: 22-Dec-2016
209/1

Date: 21-Dec-2016

Order No.: 695699/12679

Sample No: 315123

Date: 20-Dec-2016

Sample Date: 20-Dec-2016

Temp.: RT

Product: Honig/Honey

Packaging: Glas 500 ml

Kind:

Seal: ohne/without

Label: ohne/without

The test results are exclusively related to the items tested for this sample. Method and measurement uncertainty details are available upon request. This report is allowed to be copied completely and unchanged but not in extracts. Test period: order date till date of this report

Chemical-physical analysis (45153)

Pyrrrolizidine alkaloids (PA), BfR-PA-Honey-1.0/2013 with scope BfR-PA-Tea-2.0/2014, LC-MS/MS, honey

Parameter in µg/kg

LOQ*

Result

Parameter in µg/kg	LOQ*	Result
Sum of BfR-28 Pyrrrolizidine Alkaloids*		n.n.
Sum of total Pyrrrolizidine Alkaloids		n.n.
Echimidine*	1	n.n.
Echimidine-N-Oxide*	1	n.n.
Erucifoline*	5	n.n.
Erucifoline-N-Oxide*	2	n.n.
Heliotrine*	1	n.n.
Heliotrine-N-Oxide*	1	n.n.
Lycopsamine*	1	n.n.
Lycopsamine-N-Oxide*	1	n.n.
Europine*	1	n.n.
Europine-N-Oxide*	1	n.n.
Intermedine+ further tert. Lycopsamine-Type PA*	1	n.n.
Intermedin-N-Oxid* (+Indicin-N-Oxid and further LycTyp-PA-NOx)	1	n.n.
Jacobine*	1	n.n.
Jacobine-N-Oxide*	2	n.n.
Senecionine*	1	n.n.
Senecionine-N-Oxide*	1	n.n.
Seneciophylline*	1	n.n.
Seneciophylline-N-Oxide*	3	n.n.
Senecivernine*	1	n.n.
Senecivernine-N-Oxide*	1	n.n.
Senkirkine*	1	n.n.
Monocrotaline*	5	n.n.
Monocrotaline-N-Oxide*	2	n.n.
Lasiocarpine*	1	n.n.
Lasiocarpine-N-Oxide*	1	n.n.
Retrorsine*	1	n.n.
Retrorsine-N-Oxide*	2	n.n.
Riddelliine**	3	n.n.
Riddelliine-N-Oxide**	5	n.n.

Order No.: 695699

Customer No.: 12679

SN: 404471 - 1

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Amtsgericht Bremen HRB 18842
Managing Director: Gudrun Beckh

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Trichodesmine*	1	n.n.
** = no certified reference standard		
µg PA per 20 g Honey (one portion)		n.n.
µg BfR-PA* per 20 g Honey (one portion)		n.n.

* loq = limit of quantitation, n.n. = not detectable (below loq)

Scope of PA according to BfR method 2.0/2014 for plant material.

Chemical-physical analysis (45201) Antibiotics, Tetracyclines, LC-MS/MS, Honey

Substance in [µg/kg]	loq	permitted level**	Result
Oxytetracycline (Terramycine R)	10		n.n.
Tetracycline	10		n.n.
Chlorotetracycline	10		n.n.
Doxycycline	10		n.n.
Methacycline	10		n.n.
Minocycline	10		n.n.

* loq = limit of quantitation; n.n. = below loq

**no legal limit (MRL) acc. EU-Reg. 470/2009 + 37/2010 means: no permit for use of antibiotics in beekeeping

Conclusion:

Under consideration of above indicated limit of quantitation this result complies with EU Regulation 37/2010 (residues of pharmacologically active substances in foodstuffs of animal origin).

Chemical-physical analysis (45226) Antibiotic, Streptomycins, LC-MS/MS, Honey (loq 10 ppb)

Parameter in [µg/kg]	permitted level	loq*	result
Streptomycine	**	10	n.n.
Dihydrostreptomycine	**	10	n.n.

* loq = limit of quantitation, n.n. = below loq

** not allowed as no MRL acc. EU-Regulation 470/2009 + 37/2010

Conclusion:

Under consideration of above indicated limit of quantitation the result of this sample complies with current EU-Regulation for veterinary medicinal products in foodstuff of animal origin.

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Chemical-physical analysis (45237)

Antibiotics, Sulfonamides, Trimethoprim, LC-MS/MS, honey

Substance in [$\mu\text{g}/\text{kg}$]	permitted level**	loq*	result
Sulfadimethoxin	**	5	n.n.
Sulfaquinoxalin	**	5	n.n.
Sulfachlorpyridazin	**	5	n.n.
Sulfamoxol	**	5	n.n.
Sulfadoxin	**	5	n.n.
Sulfasalazin	**	5	n.n.
Sulfabenzamid	**	5	n.n.
Sulfaguanidin	**	5	n.n.
Sulfanilamid	**	10	n.n.
Sulfacetamid	**	5	n.n.
Sulfadiazin	**	5	n.n.
Sulfathiazol	**	5	n.n.
Sulfapyridin	**	5	n.n.
Sulfamerazin	**	5	n.n.
Sulfamether	**	5	n.n.
Sulfadimidin (= Sulfamethazin)	**	5	n.n.
Sulfamethoxyypyridazin	**	5	n.n.
Sulfamethoxazol	**	5	n.n.
Trimethoprim	**	5	n.n.
Sulfamonomethoxin	**	5	n.n.
Sulfaclozine	**	5	n.n.
Sulfisoxazole	**	5	n.n.
Succinylsulfatiazole	**	10	n.n.
Sulfaphenazole	**	5	n.n.
Sulfisozole	**	5	n.n.
Sulfisomidine	**	5	n.n.

* loq = limit of quantitation, n.n. = below loq

**no legal limit (MRL) acc. EU-Reg. 470/2009 + 37/2010 means: no permit for using antibiotics in beekeeping

Conclusion:

Under consideration of above indicated limit of quantitation this result complies with EU Regulation 37/2010 (residues of pharmacologically active substances in foodstuffs of animal origin).

Chemical-physical analysis (45241)

Antibiotic, Tylosine, LC-MS/MS (loq 2 ppb), honey

Substance in [$\mu\text{g}/\text{kg}$]	permitted level**	loq*	result
Tylosine A		2	n.n.
Tylosine B		2	n.n.

* loq = limit of quantitation, n.n. = below loq

**no legal limit (MRL) acc. EU-Regulation 37/2010 Annex Table 1: no permit of using Antibiotics in beekeeping

Conclusion:

Under consideration of above indicated limit of quantitation this result complies with EU Regulation 37/2010 (residues of pharmacologically active substances in foodstuffs of animal origin).

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Chemical-physical analysis (45305)

Antibiotics, Nitrofurans Metabolites, LC-MS/MS (loq 1 ppb), Honey

Substance in [$\mu\text{g}/\text{kg}$] perm. level (MRL)** loq* Result

Substance in [$\mu\text{g}/\text{kg}$]	perm. level (MRL)**	loq*	Result
Semicarbazid (from Nitrofurazon)	**	1,0	n.n.
AOZ (from Furazolidon)	**	1,0	n.n.
AH (from Nitrofurantoin)	**	1,0	n.n.
AMOZ (from Furaltadon)	**	1,0	n.n.

* loq = limit of quantitation; n.n. = below loq MRPL (2003/181/EG) 1 $\mu\text{g}/\text{kg}$

** Prohibited substance acc. EU-Regulation 37/2010 Annex Table 2

Conclusion:

Under consideration of above indicated limit of quantitation this result complies with EU Regulation 37/2010 (residues of pharmacologically active substances in foodstuffs of animal origin).

Chemical-physical analysis (86211)

Chloramphenicol (CAP), LC-MS/MS, Honey (loq 0,3 ppb)

Substance in [$\mu\text{g}/\text{kg}=\text{ppb}$] permitted level** loq* Result

Substance in [$\mu\text{g}/\text{kg}=\text{ppb}$]	permitted level**	loq*	Result
Chloramphenicol	**	0,3	n.n.

* loq = limit of quantitation, n.n./n.n. = below loq MRPL (2003/181/EC) = 0,3 $\mu\text{g}/\text{kg}$

** Prohibited substance acc. to EU Regulation 37/2010 Annex Table 2

Conclusion:

Under consideration of above indicated limit of quantitation this result complies with EU Regulation 37/2010 (residues of pharmacologically active substances in foodstuffs of animal origin).

This examination is the basis for special decision guidance.

Quality Services International GmbH

Authorized by: Annika Hoffmann

Version 1 replacing Version 0


Annika Hoffmann
Staatl. geprüfte Lebensmittelchemikerin

