

**1. chemical-physical parameters**

code	description	technology	LOQ
15100	citric acid <sup>a)</sup>	enzymatic	20 mg/Kg
10200	colour <sup>a)</sup>	hanna	1mm
10500	conductivity/pH-value <sup>a)</sup>	electrode	---
10100	diastase (activity) <sup>a)</sup>	enzymatic	3 U/Kg
13600	ethanol <sup>a)</sup>	enzymatic	30 mg/Kg
11000	F/G ratio <sup>a)</sup>	enzymatic, calculated	---
36300	formic acid <sup>a)</sup>	enzymatic	20 mg/Kg
11500	free acids <sup>a)</sup>	titration	1 mmol/Kg
10600	glycerine <sup>a)</sup>	enzymatic	30 mg/Kg
10000	HMF <sup>a)</sup>	LC	1 mg/Kg
13111	lumichrome (cornflower honey) <sup>a)</sup>	LC-MS/MS	0,5 mg/kg
13100	methylanthranilate (orange blossom honey) <sup>a)</sup>	LC	0,1 mg/Kg
16002	Methylglyoxal (MGO) <sup>a)</sup> + Dihydroxyacetone <sup>a)</sup> (DHA) (manuka honey)	NMR	30 mg/Kg
10400	moisture <sup>a)</sup>	refractometry	12%
36100	oxalic acid <sup>a)</sup>	enzymatic	15mg/Kg
13112	perseitol (avocado honey) <sup>a)</sup>	LC-MS/MS	0,2%
13000	proline <sup>a)</sup>	photometric	10 mg/kg
10300	saccharase (activity) <sup>a)</sup>	enzymatic	5 U/Kg
11800	starch <sup>a)</sup>	microscopy	1%
11001	sugar spectrum (6 substances) <sup>a)</sup> erlose, fructose, glucose, sucrose, maltose, melezitose	LC	1%
11300	thixotrophy (heather honey) <sup>a)</sup>	Thixotrophy (Louveaux)	---
11400	water-insoluble content	gravimetry	0,04 g/100g
11700	yeast <sup>a)</sup>	microscopy	---
	packages	description	
145	beekeeper special (code: 10400, 10000, 10500)	moisture, HMF, conductivity/pH-value	
105	trade analysis 1 (code: 10400, 10100, 10000)	moisture, diastase (activity), HMF	
106	trade analysis 2 (code: 10400, 10100, 10000, 10300)	moisture, diastase (activity), HMF, saccharase (activity)	
112	trade analysis 3 (code: 10400, 10100, 10000, 10300, 11000)	moisture, diastase (activity) , HMF, saccharase (activity), F/G-ratio	
136	trade analysis 5 (code: 10400, 10100, 10000, 10200, 10500)	moisture, diastase (activity), HMF, colour, conductivity/pH-value	
155	trade analysis 7 (code: 10400, 10300, 10000)	moisture, saccharase (activity), HMF	
156	trade analysis 8 (code: 10400, 10100, 10000, 11000)	moisture, diastase (activity), HMF, F/G-ratio	
190	trade analysis 11 (code: 10400, 10300, 10000, 10500)	moisture, saccharase (activity), HMF, sensoric, conductivity/pH-value	
200	type of honey specification 1	pollen analysis, conductivity/pH-value, sensoric	
201	type of honey specification 2	pollen analysis incl. geographical origin, conductivity/pH-value, sensoric	
202	type of honey specification 3	pollen analysis incl. geographical origin, conductivity/pH-value, sensoric, yeast, starch	
203	type of honey specification 4	conductivity/pH-value, colour, sensoric,	

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	fir honey; pine honey	honeydew elements
204	type of honey specification 5 canola; acacia	pollenanalysis, conductivity/pH-value, colour, sensoric, F/G-ratio
205	type of honey specification 6 cornflower	pollenanalysis, conductivity/pH-value, sensoric, lumichrome
206	type of honey specification 7 orange blossom	pollenanalysis, conductivity/pH-value, sensoric, methylantranilate
207	type of honey specification 8 calluna	pollenanalysis, conductivity/pH-value, sensoric, thixothrophy

### 2. antibiotics/ pharmacologically active substances

code	description	technology	LOQ
25000	Aminoglycosides <sup>a)</sup> Streptomycin, Dihydrostreptomycin	LC-MS/MS	0,005 mg/Kg
26000	Amphenicoles (3 substances) <sup>a)</sup> Chloramphenicol (CAP), Florfenicol, Thiamphenicol	LC-MS/MS	0,1 µg/kg (CAP) 0,5 µg/kg
27000	Chinolones (14 substances) <sup>a)</sup> Ciprofloxacin, Danofloxacin, Difloxacin, Enoxacin, Enrofloxacin, Fleroxacin, Flumequine, Lomefloxacin, Marbofloxacin, Norfloxacin, Ofloxacin, Oxolinic acid, Sarafloxacin, Sparfloxacin	LC-MS/MS	0,005 mg/Kg
27007	Chinolones (14 substances) <sup>a)</sup>	LC-MS/MS	0,002 mg/Kg
13500	Dapsone <sup>a)</sup>	LC-MS/MS	0,5 µg/Kg
24000	Macrolides (9 substances) <sup>a)</sup> Azithromycin, Clarithromycin, Clindamycin, Erythromycin (as anhydride), Josamycin, Lincomycin, Spiramycin, Tilimicosin, Tylosin	LC-MS/MS	0,005 mg/Kg
24005	Macrolides (9 substances) <sup>a)</sup>	LC-MS/MS	0,002 mg/Kg
22000	Nitrofurantolins (5 substances) <sup>a)</sup> AOZ, AMOZ, AHD, SEM, DNSH	LC-MS/MS	0,5 µg/Kg
42000	Nitroimidazoles (4 substances) <sup>a)</sup> Dimetronidazole, Iprnidazole, Metronidazole, Ronidazole	LC-MS/MS	0,5 µg/Kg
21004	Sulfonamides (20 substances) <sup>a)</sup> Ormethoprim, Trimethoprim, Succinylsulfathiazole, Sulfabenzamide, Sulfachlorpyridazine, Sulfaclozine, Sulfadiazine, Sulfadimethoxime, Sulfadoxine, Sulfamerazine, Sulfameter, Sulfamethazine, Sulfamethoxazole, Sulfamethoxypyridazine, Sulfamonomethoxime, Sulfamoxole, Sulfapyridine, Sulfaquinoxaline, Sulfathiazole, Sulfisoxazole	LC-MS/MS	0,005 mg/Kg
21010	Sulfonamides (20 substances) <sup>a)</sup>	LC-MS/MS	0,002 mg/Kg
20000	Tetracyclines (5 substances) <sup>a)</sup> Chlortetracycline, Demeclocycline, Doxycycline, Oxytetracycline, Tetracycline	LC-MS/MS	0,005 mg/Kg
20009	Tetracyclines (5 substances) <sup>a)</sup>	LC-MS/MS	0,002 mg/Kg
	<b>packages</b>	<b>description</b>	
107	antibiotics 1 (code: 27000, 24000, 20000)	Chinolones, Macrolides, Tetracyclines	
108	antibiotics 2 (code: 25000, 21004, 20000)	Aminoglycosides, Sulfonamides, Tetracycline	
109	antibiotics 3 (code: 27000, 24000)	Chinolones, Macrolides	
163	antibiotics 5 "banned substances" (code: 26000, 22000, 42000)	Amphenicoles, Nitrofurantolins, Nitroimidazoles	

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175	antibiotics XL (5ppb) (code: 25000, 21004, 20000, 27000, 24000)	Aminoglycosides, Sulfonamides, Tetracycline, Chinolones, Macrolides
271	antibiotics XL (2ppb) (Streptomycin, Dihydrostreptomycin 5ppb) (code: 25000, 21010, 20009, 27007, 24005)	Aminoglycosides, Sulfonamides, Tetracycline, Chinolones, Macrolides

### 3. residues

code	description	technology	LOQ
33000	Amitraz <sup>a)</sup>	GC-MS	0,01 mg/Kg
33005	Amitraz <sup>a)</sup>	GC-MS	0,005 mg/Kg
128	Bee repellents (6 substances) <sup>a)</sup> Benzaldehyde, Naphthalene, Nitrobenzene, Phenol, Phenylacetaldehyde, Thymol	GC-MS	depending on analyte
33200	Cymiazole <sup>a)</sup>	LC-MS/MS	0,01 mg/kg
32100	1,4-Dichlorbenzene <sup>a)</sup>	GC-MS	0,01 mg/Kg
32104	1,4-Dichlorbenzene <sup>a)</sup>	GC-MS	0,005 mg/Kg
60100	Glyphosate + Glufosinate <sup>a)</sup>	LC-MS/MS	0,01 mg/Kg
12203	Neonicotinoides (7 substances) <sup>a)</sup> Acetamiprid, Clothianidin, Dinetefuran, Imidacloprid, Nitenpyram, Thiacloprid, Thiamethoxam	LC-MS/MS	0,01 mg/Kg
40000	Pesticides GC (23 substances) <sup>a)</sup> -typical for honey- Acrinathrin, Cekafix, cis-/trans-Chlordan, Chlorpyrifos, Chlorpyrifos-methyl, Dicolfol, Dieldrin, $\alpha$ - $\beta$ - $\gamma$ - $\delta$ -HCH Heptachlor, Fipronil, Flumethrin, Folpet, Iprodione, Malathion, Methoxychlor, Phosalone, Phthalimid, Tetradifon, Vinclozolin	GC-MS	0,01 mg/Kg
41000	Pesticides LC (64 substances) <sup>a)</sup> -typical for honey- Aldicarb, Atrazin, Azoxystrobin, Boscalid, Carbendazim, Chlorfenvinphos, Clomazon, Cyprodinil, DEET, Diazinon, 2,4 Dichlorphenoxyaceticacid, Difenconazol, Dimethoat, Dimethomorph, Dimoxystrobin, Epoxiconazol, Ethofumesat, Etofenprox, Fenhexamid, Fenoxycarb, Fenpropimorph, Flonicamid, Fluazifopbutyl, Fluazinam, Fludioxonil, Flumioxacin, Fluopicolide, Fluopyram, Haloxypop-etotyl, Haloxypop-methyl, Iprovalicarb, Isoproturon, Kresoxim-methyl, MCPA, Mandestrobin, Matrine, Metalaxyl, Metconazol, Methiocarb, Metolachlor, Metrafenon, Myclobutanil, Oxymatrine, Pendimethalin, Pirimicarb, Prochloraz, Propamacarb, Propargit, Prosulfocarb, Prothioconazol, Pyraclostrobin, Pyrimenthanil, Rotenon, Spinosad A, Spinosad D, Tebuconazol, Tebufenozid, Terbutylazin, Thifensulfuron- Methyl, Thiophanat-methyl, Trichlorfon, Trifloxystrobin, Triflumoron, Tolyfluanid	LC-MS/MS	0,01 mg/Kg
12000	Phenol <sup>a)</sup>	LC	0,03 mg/Kg
30000	Pyrethroids (6 substances) <sup>a)</sup> Cyfluthrin, lamda-Cyhalothrin, Cypermethrin, Deltamethrin, Fenvalarate, Permethrin	GC-MS	0,01 mg/Kg
46000	Pyrrrolizidinalcaloids (28 substances) <sup>a)</sup> Echimidin, Echimidin-N-oxid, Erucifolin, Erucifolin-N-oxid, Europin, Europin-N-oxid, Intermedin, Indicin-N- oxid/Intermedin-N-oxid, Heliotrin, Heliotrin-N-oxid, Lasiocarpin, Lasiocarpin-N-oxid, Lycopsamin/Indizin, Lycopsamin-N-oxid, Monocrotalin, Monocrotalin-N-oxid, Retrorsin, Retrorsin-N-oxid, Senecionin/Seneciverin, Senecionin-N-oxid, Seneciphyllin, Seneciverin-N-oxid, Seneciphyllin-N-oxid, Senkirkin, Trichodesmin	LC-MS/MS	1 $\mu$ g/Kg  10 $\mu$ g/Kg PA-N-oxide

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31000	veterinary drugs (4 substances) <sup>a)</sup> Coumaphos, Fluvalinate, Dibrombenzophenone, Brompropylate	GC-MS	0,01 mg/Kg
46050	Tropanalcaloids (5 substances) <sup>a)</sup> Anisodamin, Atropin, Atropin-N-oxid, Norscopolamin, Scopolamin	LC-MS/MS	5 µg/Kg 1 µg/Kg Atropin and Scopolamin
	<b>packages</b>	<b>description</b>	
137	Pesticides 1 (typical for honey) (code: 40000, 41000)	Pesticides GC, Pesticides LC	
147	Pesticides 2 (typical for honey) (code: 41000, 12203)	Pesticides LC, Neonicotinoides	
174	Pesticides XL (typical for honey) (code: 40000, 41000, 12203, 31000, 30000)	Pesticides GC, Pesticides LC, Neonicotinoides, veterinary drugs, pyrethroids	
500	Pesticides XXL(>700 substances) <sup>aU)</sup>	Pesticides GC-MS/MS, LC-MS/MS	
508	specific analytics of pesticides max. 10 substances of spectrum Pesticides XXL (>700 subst.) <sup>aU)</sup>	Pesticides GC-MS/MS, LC-MS/MS	
550	Pyrrolizidin-/Tropanalcaloids (code: 46000, 46050)	Pyrrolizidinalcaloids, Tropanalcaloids	
103	veterinary drugs 1 (code: 31000, 40000)	veterinary drugs, Pesticides GC	
104	veterinary drugs 2 (code: 31000, 40000, 30000)	veterinary drugs, Pesticides GC, Pyrethroids	

### 4. authenticity/ adulteration

code	description	technology	LOQ
951	addition of HMF-LESS products <sup>a)</sup>	diverse	pos./neg.
952	addition of Diastase-PLUS products <sup>a)</sup>	diverse	pos./neg.
37000	<sup>13</sup> C isotopic analytics <sup>a)</sup> honey + protein, C4-sugar detection	EA-IRMS (AOAC 998.12)	1% C4-sugar
37044	<sup>13</sup> C isotopic analytics <sup>a)</sup> sugar fractions	LC-IRMS	---
	arsenic <sup>a)</sup> , see table 5 (metals/elements)	ICP-MS	---
37002	activity of β-Fructofuranosidase <sup>a)</sup>	LC	pos./neg.
37017	activity of β-Amylase <sup>a)</sup>	LC	pos./neg.
37003	activity of gamma-Amylase <sup>a)</sup>	LC	pos./neg.
37022	activity of honeyforeign alpha -Amylase <sup>a)</sup>	enzymatic	pos./neg.
38200	activity of heatstable Amylases <sup>a)</sup>	enzymatic	pos./neg.
37012	caramel colouring (E150c/d) <sup>a)</sup>	LC-MS/MS	pos./neg.
38401	Difuctoseanhydride <sup>a)</sup>	LC-MS/MS	1mg/kg
37009	honey foreign oligosacharides <sup>a)</sup> honey foreign oligosacharides/ psicose	LC	pos./neg. (0,05% psicose)
38321	LC-HRMS marker (4 substances) <sup>a)</sup> 4 Phosphatidylcholines	LC-MS/MS	---
380	LC-HRMS authenticity screening (focused on foreign C3- sugar products) <sup>a)</sup> Screening of C3- products, Detection of inverted syrups, Detection of foreign oligosaccharides, Ectoin	LC-HRMS	---
	NMR authenticity, see table 7 (NMRanalytics)	NMR	---
38221	Mannose <sup>a)</sup>	LC	0,05mg/kg
37008	Rice-syrup-marker (RSM) <sup>a)</sup> and sugar beet	LC-MS/MS	RSM: 5 mg/kg

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	syrup marker (SMB) <sup>a)</sup> Glycosylisomaltol, 3-Methoxytyramin		SMB: 0,005 mg/kg
	<b>packages</b>	<b>description</b>	
921	13C EA/LC-IRMS (code: 37000, 37044)	13C EA/LC-IRMS	
160	authenticity 1 (code: 37002, 37017, 37003)	activity of $\beta$ -Fructofuranosidase, $\beta$ -Amylase, gamma-Amylase	
161	authenticity 2 (code: 37002, 37017, 37003, 37009)	activity of $\beta$ -Fructofuranosidase, $\beta$ -Amylase, gamma-Amylase, psicose, honey foreign oligosaccharides	
162	authenticity 3 (code: 37002, 37017, 37003, 37009, 37008)	activity of $\beta$ -Fructofuranosidase, $\beta$ -Amylase, gamma-Amylase, honey foreign oligosaccharides, RSM, psicose	
176	authenticity 4 (code: 37000, 37002, 37017, 37003, 37009)	13C isotopic analytics, activity of $\beta$ -Fructofuranosidase, $\beta$ -Amylase, gamma-Amylase, honey foreign oligosaccharides, psicose	
185	authenticity 4 plus heat stable amylases (code: 37000, 37002, 37017, 37003, 37009, 38200)	13C isotopic analytics, activity of $\beta$ -Fructofuranosidase, $\beta$ -Amylase, gamma-Amylase, honey foreign oligosaccharides heatstable Amylase, psicose	
186	authenticity 5 (marker based; 11 substances) (code: 38321, 38221, 38401, 37009, 37008, 37012)	4 LC-HRMS marker (Phosphatidylcholine), Mannose, Difuctoseanhydride, Psicose, Glycosylisomaltol (RSM), 3-Methoxytyramin (SMB), Fremdoligosaccharides, E150, psicose	

### 5. metals /elements

code	description	technology	LOQ
51000	sample preparation <sup>2)</sup>	acid hydrolysis	---
	<b>code</b>	<b>description</b>	<b>technology</b>
50200	arsenic <sup>a)</sup>	ICP-MS	0,01 mg/kg
50400	cadmium <sup>a)</sup>	ICP-MS	0,02 mg/kg
50300	lead <sup>a)</sup>	ICP-MS	0,02 mg/kg
50600	mercury <sup>a)</sup>	ICP-MS	0,005 mg/kg
	<b>packages</b>	<b>description</b>	
701	Heavy metals 1 <sup>a)</sup> (code: 50300, 50400, 50600, 50000)	lead, cadmium, mercury incl. acid hydrolysis	

Further metals/ elements on request

### 6. genetically modified organism (GMO)

code	description	analysis	LOQ
<b>screening</b>			
47000	sample preparation <sup>1)</sup>	pollen extraction/ DNA extraction + clean-up	---
47050	screening 1 <sup>a)</sup>	35S/NOS/FMV	10 copies
47055	screening 2 <sup>a)</sup>	BAR/PAT	5 copies
	<b>combi- test</b>	<b>description</b>	

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47059	Triplex 35S <sup>a)</sup>	corn MON810 - corn T25 - CaMV	
<b>single events</b>			
47138	GOX (canola GT73 + canola GT200) <sup>a)</sup>	detection of glyphosat-resistance- genes	5 copies
47104	CaMV <sup>a)</sup>	detection of the nat. cauliflower mosaic virus	5 copies
47145	figwort mosaic virus promotor	detection of the nat. figwort mosaic virus	5 copies
<b>single events „corn“</b>			
47124	corn Bt176 <sup>a)</sup>	SYN-EV176-9	5 copies
47137	corn DP09814-6 <sup>a)</sup>	DP- 098140-6	5 copies
47116	corn MON810 <sup>a)</sup>	MON810 corn (MON-00810-6)	5 copies
47118	corn T25 <sup>a)</sup>	T25 corn (ACS-ZM003-2)	5 copies
47132	corn 3272 <sup>a)</sup>	SYN-E3272-5	5 copies
47139	corn MON 87460 <sup>a)</sup>	MON-87460-4	5 copies
<b>single events „canola“</b>			
47111	canola GT73 <sup>a)</sup>	GT73 canola (MON-00073-7)	5 copies
47133	canola MS8 <sup>a)</sup>	MS8 canola (ACS-BN005-8)	5 copies
47134	canola Rf3 <sup>a)</sup>	Rf3 canola (ACS-BN003-6)	5 copies
<b>single events „soy“</b>			
47108	soy Round-up Ready <sup>a)</sup>	Round-up Ready soy (MON-04032-6)	5 copies
47109	soy Round-up Ready-2 Yield <sup>a)</sup>	Round-up Ready 2 Yield soy (MON-89788-1)	5 copies
47144	soy DAS 81419 <sup>a)</sup>	DAS-81419-2	5 copies
47140	soy DP305423-1 <sup>a)</sup>	DP-305423-1	5 copies
47141	soy BPS-CV127 <sup>a)</sup>	BPS-CV127-9	5 copies
47142	soy MON 87705 <sup>a)</sup>	MON-87705-6	5 copies
47143	soy MON 87008 <sup>a)</sup>	MON-87708-9	5 copies

### 7. NMR- analytics by Honey-Profiling™ (3.1 specifications)

code	description	explanation
150	NMR-authenticity <sup>a)</sup>	1. verification of foreign sugars 2. uni-/ multivariate statistics
151	NMR-authenticity and geographical/ botanical origin <sup>a)</sup> 21 different origins 13 different monofloral varieties	<b>code 150</b> plus 1.verification of the geographical origin <b>model (country):</b> Argentina, Brazil, Bulgaria, Canada, Chile, China, Cuba, France, Germany, Guatemala, Hungary, India, Mexiko, New Zealand, Romania, Spain, Thailand, Turkey, Ukraine, Uruguay, Vietnam 2.verification of the botanical origin



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		<b>model (type of honey):</b> Acacia, Blossom, Chestnut, Eucalyptus (South America), Heather, Honeydew, Lavender (Provence), Linden, Manuka, Orange, Pine (Turkey), Rape blossom, Sunflower, Thyme (Spain), Vitex
152	NMR-authenticity <sup>a)</sup> and 15 honey relevant parameters <sup>a)</sup> (screening)	<b>code 150</b> plus acetic acid, citric acid, ethanol, formic acid, fructose, F/G, F+G, glucose, hydroxymethylfurfural (HMF), lactic acid, mannose, maltose, melezitose, proline, sucrose
153	NMR-authenticity <sup>a)</sup> , geographical/ botanical origin <sup>a)</sup> and 15 honey relevant parameters <sup>a)</sup> (screening)	<b>code 151</b> plus acetic acid, citric acid, ethanol, formic acid, fructose, F/G, F+G, glucose, hydroxymethylfurfural (HMF), lactic acid, mannose, maltose, melezitose, proline, sucrose
154	NMR-full service incl. 38 quality parameters <sup>a)</sup> (screening)	<b>code 152</b> plus acetic acid, acetoin, alanine, aspartic acid, 2,3-butanediol, citric acid, dihydroxyacetone (DHA), ethanol, formic acid, fructose, F/G, F+G, fumaric acid, gentiobiose, glucose, glutamine, hydroxymethylfurfural (HMF), kynurenic acid, lactic acid, leucine, malic acid, maltose, maltotriose, mannose, melezitose, methylglyoxal (MGO), phenylalanine, 3-phenyllactic acid, proline, pyruvic acid, quinic acid, raffinose, shikimic acid, succinic acid, sucrose, turanose, tyrosine, valine
	<b>packages</b>	<b>description</b>
192	NMR Manuka – authenticity <sup>a)</sup>	NMR-authenticity and geographical / botanical origin (code 151) plus MGO (Methylglyoxal), DHA (Dihydroxyacetone), 3-Phenyllactic acid

### 8. microbiology

code	description	technology	LOQ
70160	sample preparation <sup>3)</sup>	---	---
code	description	technology	LOQ
70164	aerobic sporeforming	microbiology	---
70169	coliforme germs	microbiology	10 cfu/g
70168	E-Coli	microbiology	10 cfu/g g
70162	enterobacteria <sup>aU)</sup>	microbiology	10 cfu/g
70199	listeria monocytogenes <sup>aU)</sup>	microbiology	pos./neg./25g
70161	total aerobic mesophyll bacteria count	microbiology	10 cfu/g
70166	mold	microbiology	10 cfu/g

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70163	salmonella <sup>aU)</sup>	microbiology	pos./neg./25g
70198	staphylococcus (coagulase positive) <sup>aU)</sup>	microbiology	100 cfu/g
70165	sulfite-reducing clostridia <sup>aU)</sup>	microbiology	10 cfu/g
70167	yeasts	microbiology	10 cfu/g

### 9. additional specific services

code	description	technology	LOQ
423	chlorate/ perchlorate <sup>a)</sup>	LC-MS/MS	0,01mg/Kg
760	Declaration	---	---
41850	Dithiocarbamates <sup>aU)</sup>	GC-MS	0,01 mg/Kg (CS <sub>2</sub> )
29201	Perfluoralkyl substances (PFAs) <sup>a)</sup> (14 substances) Carboxylic acids (PFOA): Perfluorbutane, - pentane, - hexane, -heptane, -octane, -nonane, -decane, -undecane, - dodecane, -tridecane, -tetradecanoicacid Sulfonic acid (PFOS): perfluorbutansulfone, - hexansulfone, -octansulfonicacid	LC-MS/MS	1-2 µg/kg depending on analyte
41800	Polychlorinated biphenyls (PCBs) <sup>a)</sup> (6 substances) PCB 28,52,101,138,153,180	GC-MS/MS	1,0 µg/kg
46030	Polycyclic aromatic hydrocarbons (PAHs) <sup>a)</sup> (16 substances, EPA-method) <sup>a)</sup> Acenaphthalene, Acenaphthylene, Anthracene, Benz(a)anthracene, Benzo(a)pyrene, Chrysene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene	GC-MS	0,1µg/kg; 0,3µg/kg Naphthalene
70215	quaternary ammonium compounds <sup>a)</sup> (9 substances) BAC 8, BAC 10, BAC 12, BAC14, BAC 16, BAC 18, DDAC 8, DDAC 10, DDAC 12	LC-MS/MS	0,01mg/Kg

### 10. bee diseases

code	description	technology	LOQ
905	European Foulbrood <sup>aU)</sup> Peanibacillus alvei/ Mellissococcus plutionius	PCR	pos./neg.
906	American Foulbrood <sup>aU)</sup> Peanibacillus larvae	PCR	pos./neg.
907	Nosema spores <sup>aU)</sup>	microscopy	pos./neg.
908	Nosema ceranae <sup>aU)</sup>	PCR	pos./neg.
909	Nosema apis <sup>aU)</sup>	PCR	pos./neg.

## Additional specific analytical services for beepollen, royal jelly, propolis

### Beepollen

Further relevant analyses for beepollen (shown in the honey services) are also available

code	description	technology	LOQ
39000	Aflatoxins B1, G1, B1, G2 <sup>a)</sup>	LC-MS/MS	0,5 µg/kg



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39053	Ochratoxin <sup>a)</sup>	LC-MS/MS	0,5 µg/kg
122	pollen analysis incl. botanical. origin <sup>a)</sup>	microscopy	---
138	pollen analysis incl. botanical. and geographical origin <sup>a)</sup>	microscopy	---
10413	moisture/ drymatter <sup>a)</sup>	gravimetry	1%

## Royal jelly

Further relevant analyses for Royal jelly (shown in the honey services) are also available

code	description	technology	LOQ
13201	10-Hydroxydececanid (10-HDA) <sup>a)</sup>	LC	0,1 mg/kg
10403	water/ drymatter <sup>a)</sup>	gravimetry	1%

## Propolis/- products

Further relevant analyses for Propolis (shown in the honey services) are also available

code	description	technology	LOQ
70405	drymatter <sup>a)</sup>	gravimetry	---
70401	Flavonoids calc. as hyperoside <sup>aU)</sup>	DAB	---
70409	Flavonoids calc. as hyperoside <sup>aU)</sup>	Pharm. Eur.	---
70403	total polyphenolics (nach Folin-Ciocalteu) <sup>aU)</sup>	photometric	
70407	wax content <sup>aU)</sup>	gravimetry	

<sup>a)</sup> accredited method

<sup>aU)</sup> accredited method by sub-order lab

note: for generating mix- samples there would be a standard price of €10/mixed sample charged (code 45998).

1) for GMO analysis, it is important to make the sample preparation first. Afterwards it is possible to analyze up to 5 GMO single events per sample.

2) for metal analysis, it is important to make the sample preparation first. Afterwards it is possible to analyze up to 10 different metals per sample.

3) for microbiologic analysis, it is important to make the sample preparation first. Afterwards it is possible to analyze further different microbiologic analysis per sample.

Further analyses on request

All prices in EURO excluding VAT

Conditions of payment: 14 days from date of invoice

Sample amount: minimum 100g per sample (honey, beepollen) 30g for royale jelly, for GMO analysis additionally min. 100g per sample.

Processing time: - normally 2-3 days for trade analysis, GMO  
- normally up to 5 days for residues/antibiotics, NMR, metals and microbiology

Storage: - samples will be stored until 6 months at room temperature  
- royale jelly will be stored at -18°C