

Test Report

Berlin, 06.09.2019

Sample number: 19/094001
Client: BILLA Bulgaria Ltd.
 55 Bulgaria Blvd.
 Bulgaria-1404 Sofia
Date of entrance: 04.09.2019
Samplename: Melon Delicatessen
Samplenummer customer: 00BBU19090306
Organic: no
Origin: Bulgaria
Grower:
Lot: 36/02
Unit: approx. 3,8 kg
Quantity: 1
Package: bulk product, transport packaging, sealed, label
Sampling: by client, sample entry by delivery service
Added Identification: Seal Nr. 0395324
Begin of examination: 04.09.2019
End of examination: 06.09.2019



Examination of pesticides¹⁾

Scope of testing:	Melonen			
Examination method:	PV-SA-085 (GC) ² ; (GC-MS/MS) 2019-06			
Parameters	Unit	Result	MRL	RL
Phthalimid (Metabolit Folpet)	mg/kg	0,025		0,010
Scope of testing:	pesticides LC			
Examination method:	PV-SA-085 (LC) ² ; (LC-MS/MS) 2019-06			
Parameters	Unit	Result	MRL	RL
Azoxystrobin	mg/kg	<LoQ	1,00	0,010

RL = Reporting limit

MRL = Maximum residue level

1) Overview of the examined pesticides after the Combi-method (PV-SA-085), state 21.08.2019

2) PV-SA-085: combined procedure from the methods DFG S19 and QuEChERS with the detection modules LC-MS/MS and GC-MSD

ARfD-Evaluation:

Substance	Content [mg/kg]	MRL [mg/kg]	EH MRL [%]	QC [g]	VF	Intake [mg/kg BW]	ARfD [mg/kg KG]	EH ARfD [%]	NoP
Phthalimid (Metabolit Folpet)	0,025			540	5	0,00379	n.e.	-	0
Azoxystrobin	<LoQ	1,00		540	5	0,00000	n.e.	-	0

Calculation model: EFSA PRIMo rev3

Calculation model: 2b (Fruit weight: 540 g)

QC = Quantity of consumption

VF = Variability-factor

EH = Exhaustion

MRL = Maximum residue level

NoP = Number of Pesticides

n.e. = not exist

BW = Body weight

Referenced body weight: 17,8 kg

Conclusion

The sample examined contains Phthalimid at a concentration of 0.025 mg/kg.

With effect from 26 August 2016 a new residue definition applies to the fungicide Folpet, which includes besides Folpet also the metabolite Phthalimide (Sum of folpet and phtalimide, expressed as folpet" Regulation (EU) 2016/156). In addition, however Phthalimide can also occur as a degradation product of the insecticide Phosmet (see EFSA reasoned opinion).

In addition to the above-mentioned sources Phthalimide could often be formed independently of the presence of Folpet or Phosmet. Phthalimide can also be formed through reactions with primary amino groups of the ubiquitous environmental chemicals "Phthalic acid" and "Phthalic anhydride", which are usually contained in food. This occurs especially when exposed to heat.

The frequency of detection of Phthalimide particularly in dried products without the simultaneous detection of Folpet or Phosmet, is an indication that the predominant Detections of Phthalimide are due to the above-mentioned formation mechanism due to "Phthalic acid" and "Phthalic anhydride".

Thus, the traceability of Phthalimide according to the residue definition for Folpet on the metabolite is not clearly possible. Where Phthalimide is detected simultaneously with Folpet, an application of the residue definition is possible, but has to be considered case by case, for example, at MRL exceedance a possible entry on the above-mentioned environmental chemicals has to be discussed.

Since neither Folpet nor Phosmet were detected, it can be assumed that the entry is due to environmental contamination.

Overall, the present sample should be considered as marketable in the examined parameters [1,2].

References:

[1] Collection of texts on food law in the most current version, publisher C. H. Beck

[2] Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC