 <p>PPO Services AG Herrenmattstrasse 2 CH-4658 Däniken</p>	<p>QM - Managementsystem</p>	<p>Kapitel 3 Supportprozess_Administration Unterkapitel: 3.4 Qualitätssicherung AW 3.4.011 Weisung zum Pestizidmonitoring_PPO_en Revisionsstand: 4 Ausgabeänderungsdatum: 04.09.2017 Dokument erstellt am:27.01.2016 Seite 1 von 6</p>
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Instruction for the pesticide monitoring

1 Aim

The aim of Mehadrin Central Europe AG and their clients is a reduction of pesticide residues in fruits and vegetables at a level of maximum 3 to 5 substances. This criterion is very important for MCE to pass the certification *Swissgap*.

2 Use of sprays

Production regulations of the particular country of origin apply. But the quantity of residues in the final product has to comply with the limits of the country of sale. The number of allowed substances is dependent on the product group.

2.1 Limits of residues in the final product


Switzerland	Europe
<p>SR 817.021.23: Regulation on Foreign Substances and Components of Foodstuffs</p> <p>https://www.admin.ch/opc/de/classified-compilation/20143405/index.html</p>	<p>Regulation (EC) No 396/2005 on Maximum Residue Levels of Pesticides in or on Food and Feed of Plant and Animal Origin</p> <p>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32005R0396&qid=1439307627733&from=DE</p> <p>EU Pesticide database</p> <p>http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database/public/?event=pesticide.residue.selection&language=EN</p>

2.2 Limits of multiple residues

Mehadrin Central Europe accept only a certain number of residues. Dependent on the product, a maximum of 3 to 5 substances is allowed.

2.2.1 Fruits

		No. of active substances and degree of Compliance (DoC [%])		
Group	Product	DoC 100	DoC 50	DoC 10
Pome fruit	All	4	5	≥ 6
Stone fruits without cherries	All	4	5	≥ 6
Cherries	All	4	5-6	≥ 7
Berries	Strawberries, raspberries, blackberries and other buch berries	5	6	≥ 7
Grapes	All	5	6	≥ 7
Citrus fruits	All	4	5	≥ 6

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Nuts	Nuts incl. Chestnuts	3	4	≥ 5
Exotic fruits	All incl. melons	3	4	≥ 5

2.2.2 Vegetables

		No. of active substances and Degree of Compliance (DoC [%])		
Group	Product	DoC 100	DoC 50	DoC 10
Salad	all	4	5	≥ 6
Fruit vegetables	All incl. tomatoes, cucumbers and peperoni	4	5	≥ 6
Cabbage	all	3	4	≥ 5
Root and tuber vegetables	all	3	4	≥ 5
Bulb vegetables	all	3	4	≥ 5
Spinach	all	3	4	≥ 5
Herbs	all	4	5	≥ 6

For all products or product groups which are not part of this table a maximum of 3 substances is accepted to reach a degree of compliance of 100%.

3 Analysis of residues

3.1 Self control

Suppliers are required to carry out regular controls of their products as part of the internal controls specified by law. Basis of the evaluation of these requirements is this document.

3.2 Requirements for the laboratories

- Accreditation under ISO 17'025
- Number of active substances investigated: ≥ 400, distributed over all relevant groups of active substances
- Confirmation of all positive findings with mass spectrometry
- Sensitivity: for most analyses a detection limit of 0.01mg/kg must be achieved

3.3 Evaluation of the analysis

Degree of Compliance 100 = Results satisfy the requirements

Degree of Compliance 50 = Major fault, legal regulations or MCE requirements are not totally fulfilled regarding this document (for example 5 instead of 4 allowed substances)

Degree of Compliance 10 = Critical fault, legal regulations or MCE requirements are not fulfilled

3.3.1 Further procedure in case of insufficient analyse results (DoC ≤ 50)

- The party who receive an insufficient analyse must inform the other party immediately
- Supplier must write a proper statement including spray record, Global GAP certificate of the grower and own analyses of the same parcel.
- Define further consequences regarding supplier agreement

Applicable document: Fo 3.4.009 Supplier agreement

4 Forbidden Substances

In case of the use of any forbidden substances the supplier has to carry all incurred costs.

4.1 DDAC/BAC

Residues of Didecyldimethylammonium chloride and Benzalkonium chloride are forbidden. These substances are used as disinfection and surfactants or parts of biocide.

4.2 Chlormequat and mepiquat

The two plant growth regulations *chlormquat* and *mepiquat* are not permitted.

4.3 Other forbidden substances

Substance active	CAS-Nr.	POP	PIC	PAN 12	WHO 1a	WHO 1b
(beta-) Cyfluthrin	68359-37-5					X
1,2-Dichlorethane	107-06-2		X			
2,3,5-T and its salts and esters	93-76-5		X	X		
3-Chlor-1,2-propandiol (3-MCPD)	96-24-2					X
Acrolein	107-02-8					X
Alachlor	15972-60-8		X			
Aldicarb	116-06-3		X	X	x	
Aldrin	309-00-2	X	X	X		
All tributyl tin compounds	56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2		X			
Allyl Alcohol	107-18-6					X
Alpha hexachlorocyclohexane	319-84-6	X				
Azinphos-ethyl	2642-71-9					X
Azinphos-methyl	86-50-0		X			X
Beta hexachlorocyclohexane	319-85-7	X				
Binapacryl	485-31-4		X			
Blasticidin S	2079-00-7					X
Bleihydrogenarsenat	7784-40-9					X
Brodifacoum	56073-10-0				X	
Bromadiolon	28772-56-7				X	
Bromethalin	63333-35-7				X	
Butocarboxim	34681-10-2					x
Butoxycarboxim	34681-23-7					x
Cadusafos	95465-99-9					x
Calciumarsenat	7778-44-1					x
Calciumcyanid	592-01-8				x	
Camphechlor / Tocaphen						
Captafol	2425-06-1		X		x	
Carbofuran						
Carbosulfan						
Cartap						

Chinomethionat						
Chlordane	57-74-9	X	X	X		
Clordecone	143-50-0	X				
Chlordimeform	6164-98-3		X	X		
Chlorethoxyfos	54593-83-8				X	
Chlorfenvinphos	470-90-6					x
Chlormephos	24934-91-6				X	
Chlorobenzilat	510-15-6		X			
Chloropicrin						
Chlorphacinon	3691-35-8				X	
Coumaphos	56-72-4					x
Coumatetralyl	5836-29-3					x
DBCP	96-12-8			X		
DDT	50-29-3	X	x	X		
Demeton-S-methyl	919-86-8					x
Dichlorvos	62-73-7					x
Dicrotophos	141-66-2					x
Dieldrin	60-57-1	X	X	X		
Difenacoum	56073-07-5				X	
Difethialon	104653-34-1				X	
Dinitro-ortho-cresol						
Dinocap						
Dinoseb and its salts and esters	88-85-7		X			
Dinoterb	1420-07-1					x
Diphacinon	82-66-6				X	
Disulfoton	298-04-4				X	
DNOC and its salts (such as ammonium salt, potassium salt and sodium salt)	534-52-1		X			x
Edifenphos	17109-49-8					x
Endosulfan	115-29-7	X	X			
Endrin	72-20-8	X		X		
EPN	2104-64-5				X	
Ethiofencarb	29973-13-5					x
Ethoprophos	13194-48-4				X	
Ethoprophos / Ethoprop						
Ethylene dibromide	106-93-4		X	X		
Ethylene oxide	75-21-8		X			
Famphur	52-85-7					x
Fipronil						
Fenamiphos	22224-92-6					x
Fentinhydroxid						
Flocoumafen	90035-08-8				X	
Flucythrinat	70124-77-5					x
Fluoroacetamide	640-19-7		X			x
Flusiazole						
Formetanat	22259-30-9					x
Formulation with >1000g Phosphamidon						
Formulation with >7% Benomyl, >10% Carbofuran						
Furathiocarb	65907-30-4					x
HCH (mixed isomers)	608-73-1		X	X		
Heptachlor	76-44-8	X	X	X		

Heptenophos	23560-59-0					x
Hexachlorobenzene	118-74-1	X	X		X	
Hexachlorbenzol						
Isophenphos-Methyl						
Isoprocarb						
Isoxathion	18854-04-8					x
Kupfer(II)-arsenitacetat	12002-03-8					x
Lindane	58-89-9	X	X	x		
Mecarbam	2595-54-2					x
Methamidophos (lösliche Flüssigformulierungen der Substanz von mehr als 600 g Wirkstoff/Liter)	10265-92-6		X			x
Methidathion	950-37-8					x
Methiocarb1	2032-65-7					x
Methomyl	16752-77-5					x
Methylparathion	298-00-0		X	X	X	
Mevinphos	26718-65-0				X	
Mirex	2385-85-5	x				
Monocrotophos	6923-22-4		X			x
Monosultap						
Natriumcyanid	143-33-9					X
Natriumfluoracetat	62-74-8				X	
Natriummetaarsenit	7784-46-5					X
Nicotin	54-11-5					X
Nitenpyram						
Omethoat	1113-02-6					X
Oxamyl	23135-22-0					X
Oxydemeton-methyl	301-12-2					X
Paraquat						
Paraquat dichloride	1910-42-5 4685-14-7			X		
Parathion	56-38-2		X	X	X	
Pentachlorobenzol	608-93-5	X				
Pentachlorophenol and its salts and esters	87-86-5		X	X		X
Phenyl-Quecksilberacetat	62-38-4				X	
Phorate	298-02-2				X	
Phosphamidon	13171-21-6 23783-98-4 297-99-4		X			
Propetamphos	31218-83-4					X
Quecksilber(II)-chlorid	7487-94-7				X	
Quecksilber(II)-oxid	21908-53-2					X
Mercury compounds, including inorganic mercury compounds, alkyl mercury compounds and alkyloxyalkyl and aryl mercury compounds			X			
Quitazon						
Sodium fluoracetate						
Strychnin	57-24-9					X
Sulfotep	3689-24-5				X	
Tebupirimfos	96182-53-5				X	
Tefluthrin	79538-32-2					X



PPO Services AG
Herrenmattstrasse 2
CH-4658 Däniken

QM - Managementsystem

Kapitel 3 Supportprozess_Administration
Unterkapitel: 3.4 Qualitätssicherung
**AW 3.4.011 Weisung zum
Pestizidmonitoring_PPO_en**
Revisionsstand: 4
Ausgabeänderungsdatum: 04.09.2017
Dokument erstellt am:27.01.2016
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Terbufos	13071-79-9				X	
Thallium(I)-sulfat	7446-18-6					X
Thiocyclam						
Thiofanox	39196-18-4					X
Thiometon	640-15-3					X
Toxaphen	8001-35-2	X	X	X		
Triazophos	24017-47-8					X
Component containing Tributyltin						
Vamidothion	2275-23-2					X
Dustable powder formulations containing a combination of benomyl at or above 7%, carbofuran at or above 10% and thiram at or above 15%	7804-35-2 1563-66-2 137-26-8		X			- X -
Warfarin	81-81-2					X
Zeta-Cypermethrin2	52315-07-8					X
Z-Phosphamidon						
Zinkphosphid	1314-84-7					X

Information source:

POP: <http://chm.pops.int/Convention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx>

PIC: <http://www.pic.int/TheConvention/Chemicals/AnnexIIIChecklist/tabid/1132/language/en-US/Default.aspx>

PAN 12: <http://www.pesticideinfo.org>

WHO 1a und 1b: http://www.who.int/ipcs/publications/pesticides_hazard/en

Validity of this agreement: 3 years

Place, date

Stamp, signature