FOOD ANALYSIS

A VALIDATED LC/MS/MS SOLUTION FOR THE ANALYSIS OF PESTICIDES AND OTHER CHEMICALS IN APPLES

Solutions for Your Analytical Business
Markets and Applications Programs

Agilent Technologies
Authorized Partner Laboratory

Matrices
- Apples

Target Compounds
- Pesticides

Agilent Guaranteed Solution
Developed
Installed
Tested
Supported

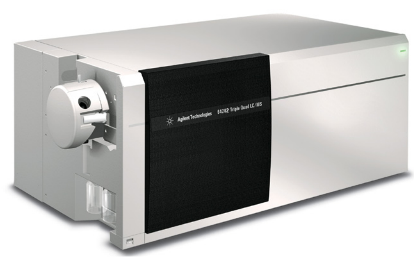
This Solution is dedicated to the analysis of 126 pesticides in apples.

Pesticides and other chemicals are used widely in agriculture.

European Community regulations determine the maximum allowed amounts of those compounds in different matrices for its member states.

Agilent offers a turn-key Solution covering:

- Sample analysis
- Data analysis
- Full Agilent support

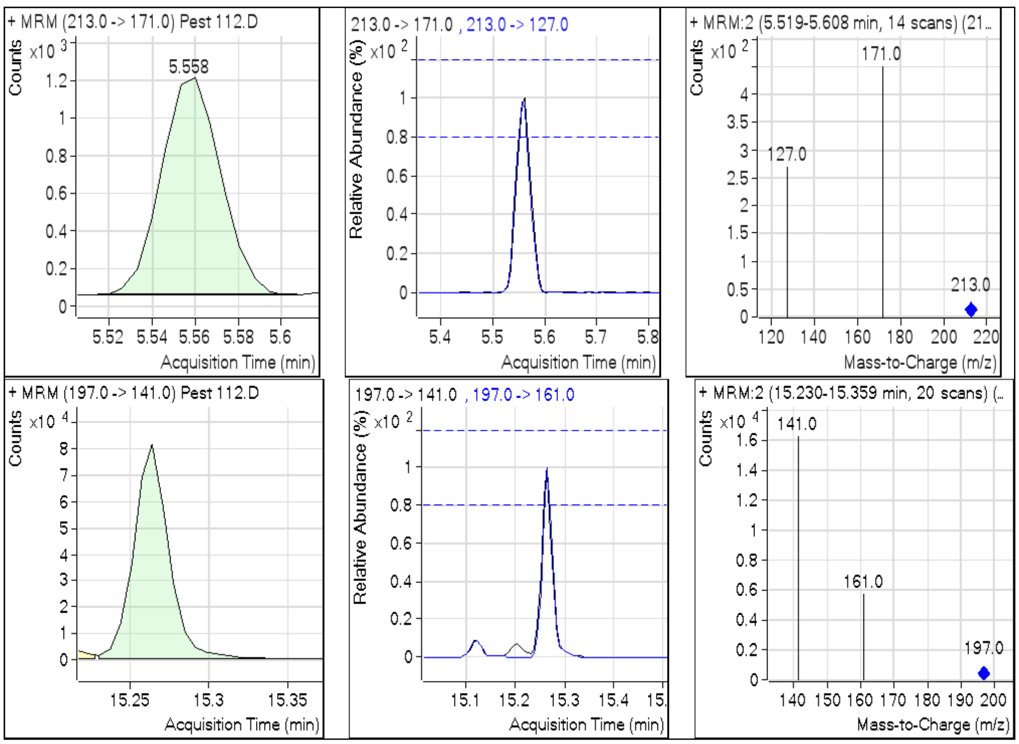


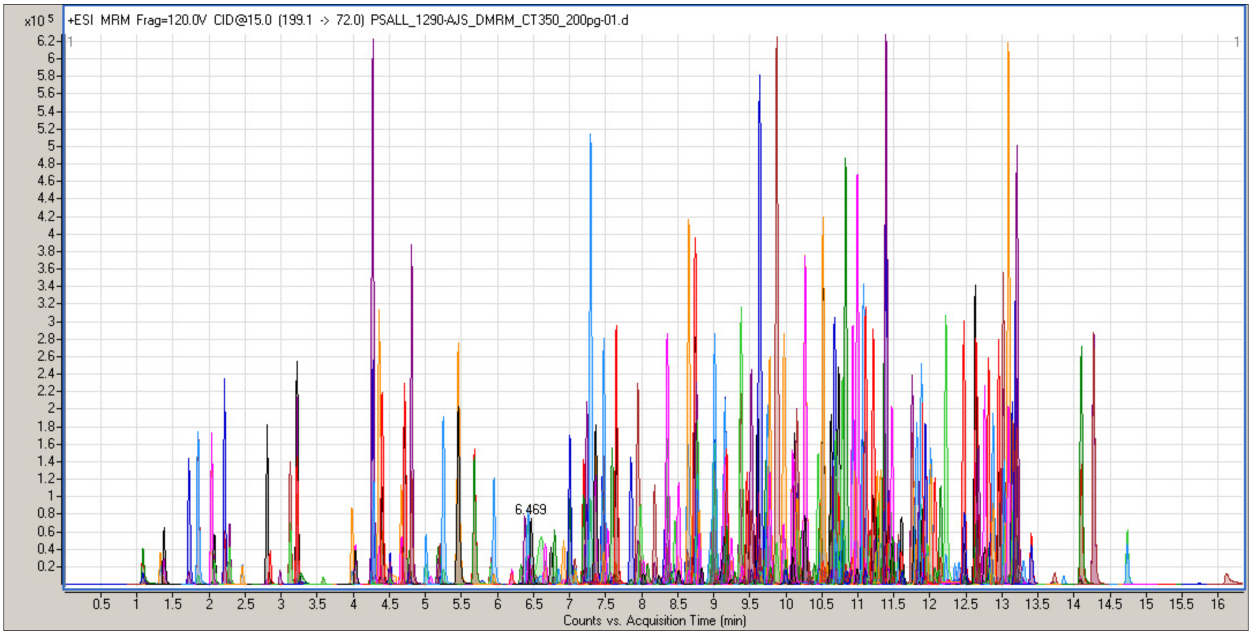
The working range goes from 0.01 mg/kg to 0.10 mg/kg for all analytes. LOQs, LODs, precision and recoveries are in accordance to DG SANCO guidelines.

Sample preparation is done following QuEChERS approach: extraction with organic solvent followed by dispersive SPE with Bond Elut material. Sample analysis is performed with an Agilent UHPLC 1260 and an Agilent 6420 triple quadrupole.

The Agilent Pesticides Solution for apples comprises the following:

- Complete hardware set-up (Agilent 1260 UHPLC and Agilent 6420 triple quadrupole) with dedicated analytical column;
- Standard operating procedure (SOP) with detailed descriptions of the analysis.
- Method of analysis (a DVD/CD containing sample preparation and sample analysis methods, recommended consumables and materials);
- Optional: one week training at Laboratorio Químico-Microbiológico (Murcia, Spain) on sample prep, validation procedures and analytical methods;
- On-site Training and Support (at customer site) covering Qualitative and Quantitative analysis;





PESTICIDES					
3-HYDROXYCARBOFURAN	CHLOROXURON	DODINE	FURATHIOCARB	METHOXYFENOZIDE	PYRACLOSTROBIN
ABAMECTIN	CHLORSULFURON	EMA B1a	HEXAFLUMURON	METOBROMURON	ROTENONE
ACEPHATE	CIMOXANIL	EMA B1b	HEXYTHIAZOX	METOXURON	SIMAZINE
ACETAMIPRID	CIROMAZINE	EPOXICONAZOLE	IMAZALIL	MONOLINURON	SPINOSYN-A
ALDICARB	CLETHODIM	ETIOFENCARB	IMIDACLOPRID	MONURON	SPINOSYN-D
ALDICARB-SULFONE	CLOFENTEZINE	ETIOFENCARB-SULFONE	INDOXACARB	NEBURON	SPIRODICLOFEN
ALDICARB-SULFOXIDE	CLOTHIANIDIN	ETIOFENCARB-SUL-FOXIDE	IPROVALICARBO	NITENPYRAN	SPIROMESIFEN
ATRAZINE	CYANOPHENFOS	ETOFENPROX	ISOCARBOPHOS	OXADIAZON	SPIROXAMINE
AZOXYSTROBIN	CYAZOFAMID	ETOXAZOLE	ISOFENPHOS-METHYL	OXADIXYL	TEBUFENOZIDE
BENTHIOCARB	CYCLOXYDIM	FAMOXADONE	ISOPROTURON	OXAMYL	TEBUFENPYRAD
BOSCALID	DEMETON-S-METIL-SULFONE	FENAZAQUIN	LINURON	OXAMYL-OXIME	TEFLUBENZURON
BRODIFACOUM	DICHLOFLUANID	FENBUCONAZOLE	LUFENURON	OXYDEMETON-METHYL	THIABENDAZOLE
BROMADIOLONE	DIETHOFENCARB	FENBUTATIN OXIDE	MEPANIPYRIM	PHENMEDIPHAM	THIACLOPRID
BROMUCONAZOLE	DIFENOXURON	FENHEXAMID	MEPRONIL	PIRIMICARB	THIOBENCARB
BUTOXYCARBOXIM	DIFLUBENZURON	FENOXYCARB	METALAXYL-M	PROMECARB	THIODICARB
BUTURON	DIFLUFENICAN	FENPROPIMORPH	METAMIDOFOS	PROMETRIN	TIAMETOXAM
CARBARYL	DIMETHOMORPH	FENPYROXIMATE	METAMITRON	PROPAMOCARB	TOLCLOFOS METHYL
CARBENDAZIM	DINICONAZOLE	FENURON	METHIOCARB	PROPARGITE	TRIDEMORPH
CARBOFURAN	DIOXACARB	FLONICAMID	METHIOCARB-SUL-FONE	PROPOXUR	TRIFLUMURON
CHLORBROMURON	DITALINFOS	FLUFENOXURON	METHIOCARB-SUL-FOXIDE	PROSULFOCARB	TRIFORINE
CHLOROTOLURON	DIURON	FLUOMETURON	METHOMYL	PYMETROZINE	ZOXAMIDE

SOP	
G1312B	Mobile Phase A: Acetonitrile 0.1% formic acid
	Mobile Phase B: Water 2mM amonium formiate-0.1% formic acid
	Flow: 0.6 mL/min
	Gradient:
	A B
	Time: 0 minutes 20% 80%
	Time: 10 minutes 100% 0%
	Time: 17 minutes 100% 0%
	Time: 18 minutes 20% 80%
	Stop time: 18 minutes
	Post time: 6 minutes
G1329B	Injection Volume: 5µl
G1316B	Right and Left Temperature 20°
COLUMN: POROSHELL 120 EC-C18 3.0*100 mm 2.7um	

G6420BA	
Source Parameters	
Parameter	**Value (-)**
Gas Temp (°C)	350
Gas Flow (l/min)	9
Nebulizer (psi)	40
Capillary (V)	4000

Cpd Name	ISTD?	Prec Ion	MS1 Res	Prod Ion	MS2 Res	Frag (V)	CE (V)	Ret Time (min)	Ret Window	Polarity
8-HYDROXYQUINOLINE	No	145.9	Wide / Unit (6490)	128	Wide / Unit (6490)	150	25	3.4	2	Positive
8-HYDROXYQUINOLINE	No	145.9	Wide / Unit (6490)	101	Wide / Unit (6490)	150	35	3.4	2	Positive
8-HYDROXYQUINOLINE	No	145.9	Wide / Unit (6490)	75	Wide / Unit (6490)	150	50	3.4	2	Positive
CYROMAZIN	No	166.9	Wide / Unit (6490)	125	Wide / Unit (6490)	110	15	3.42	2	Positive
CYROMAZIN	No	166.9	Wide / Unit (6490)	85	Wide / Unit (6490)	110	20	3.42	2	Positive
PYMETROZIN	No	217.9	Wide / Unit (6490)	105	Wide / Unit (6490)	110	20	3.43	2	Positive
PYMETROZIN	No	217.9	Wide / Unit (6490)	78	Wide / Unit (6490)	110	45	3.43	2	Positive
PROPAMOCARB	No	189.3	Unit/Enh (6490)	144.2	Unit/Enh (6490)	90	10	3.44	2	Positive
PROPAMOCARB	No	189.3	Unit/Enh (6490)	102.1	Unit/Enh (6490)	90	15	3.44	2	Positive
IMINOCTADINE	No	356.1	Wide / Unit (6490)	314.3	Wide / Unit (6490)	150	20	3.45	2	Positive
IMINOCTADINE	No	356.1	Wide / Unit (6490)	297.2	Wide / Unit (6490)	150	30	3.45	2	Positive

DEMETON S METIL	No	245	Wide / Unit (6490)	168.9	Wide / Unit (6490)	90	5	3.45	2	Positive
DEMETON S METIL	No	245	Wide / Unit (6490)	108.9	Wide / Unit (6490)	90	25	3.45	2	Positive
ACEFATO	No	184	Wide / Unit (6490)	143	Wide / Unit (6490)	70	3	3.45	2	Positive
ACEFATO	No	184	Wide / Unit (6490)	95	Wide / Unit (6490)	70	20	3.45	2	Positive
METHAMIDOPHOS	No	141.9	Wide / Unit (6490)	125	Wide / Unit (6490)	90	10	3.45	2	Positive
METHAMIDOPHOS	No	141.9	Wide / Unit (6490)	94	Wide / Unit (6490)	90	15	3.45	2	Positive
ALDICARB SULFOXIDO	No	207.1	Wide / Unit (6490)	132.1	Wide / Unit (6490)	60	2	3.56	2	Positive
ALDICARB SULFOXIDO	No	207.1	Wide / Unit (6490)	89	Wide / Unit (6490)	60	10	3.56	2	Positive
CARBENDAZIMA	No	192.1	Wide / Unit (6490)	160	Wide / Unit (6490)	90	15	3.74	2	Positive
CARBENDAZIMA	No	192.1	Wide / Unit (6490)	132	Wide / Unit (6490)	90	25	3.74	2	Positive
THIABENDAZOL	No	202	Wide / Unit (6490)	175	Wide / Unit (6490)	130	30	4	2	Positive
THIABENDAZOL	No	202	Wide / Unit (6490)	131	Wide / Unit (6490)	130	35	4	2	Positive
OXAMILO-OXIMA	No	163.1	Wide / Unit (6490)	90.1	Wide / Unit (6490)	70	10	4.06	2	Positive
OXAMILO-OXIMA	No	163.1	Wide / Unit (6490)	72.1	Wide / Unit (6490)	70	10	4.06	2	Positive
OXYDEMETON METHYL	No	246.9	Wide / Unit (6490)	168.9	Wide / Unit (6490)	90	10	4.22	2	Positive
OXYDEMETON METHYL	No	246.9	Wide / Unit (6490)	109	Wide / Unit (6490)	90	20	4.22	2	Positive
NITEMPYRAM	No	271	Wide / Unit (6490)	237	Wide / Unit (6490)	90	20	4.81	2	Positive
NITEMPYRAM	No	271	Wide / Unit (6490)	126	Wide / Unit (6490)	90	25	4.81	2	Positive
OXAMILO	No	237.1	Wide / Unit (6490)	90	Wide / Unit (6490)	60	2	5.1	2	Positive
OXAMILO	No	237.1	Wide / Unit (6490)	72.1	Wide / Unit (6490)	60	12	5.1	2	Positive
BUTOXICARBOXIM	No	222.9	Wide / Unit (6490)	166	Wide / Unit (6490)	70	2	5.13	2	Positive
BUTOXICARBOXIM	No	222.9	Wide / Unit (6490)	106	Wide / Unit (6490)	70	5	5.13	2	Positive
ALDICARB SULFONE	No	240.1	Wide / Unit (6490)	223.1	Wide / Unit (6490)	70	5	5.3	2	Positive
ALDICARB SULFONE	No	240.1	Wide / Unit (6490)	86.1	Wide / Unit (6490)	70	15	5.3	2	Positive
METOMILO	No	163	Wide / Unit (6490)	106	Wide / Unit (6490)	70	5	5.95	2	Positive
METOMILO	No	163	Wide / Unit (6490)	88	Wide / Unit (6490)	70	5	5.95	2	Positive
ETHIOFENCARB	No	242.1	Wide / Unit (6490)	185	Wide / Unit (6490)	70	10	6	2	Positive
ETHIOFENCARB SULFOXIDO	No	242.1	Wide / Unit (6490)	185	Wide / Unit (6490)	80	5	6	2	Positive
ETHIOFENCARB	No	242.1	Wide / Unit (6490)	107	Wide / Unit (6490)	70	15	6	2	Positive

ETHIOFENCARB SULFOXIDO	No	242.1	Wide / Unit (6490)	107	Wide / Unit (6490)	80	15	6	2	Positive
DEMETON S METIL SULFONE	No	263	Wide / Unit (6490)	168.9	Wide / Unit (6490)	110	15	6.3	2	Positive
DEMETON S METIL SULFONE	No	263	Wide / Unit (6490)	108.9	Wide / Unit (6490)	110	20	6.3	2	Positive
AC GIBERELICO	No	364.1	Wide / Unit (6490)	329.1	Wide / Unit (6490)	110	10	6.4	2	Positive
AC GIBERELICO	No	364.1	Wide / Unit (6490)	239.1	Wide / Unit (6490)	110	10	6.4	2	Positive
THIAMETOXAN	No	292	Wide / Unit (6490)	211.1	Wide / Unit (6490)	70	10	6.45	2	Positive
THIAMETOXAN	No	292	Wide / Unit (6490)	181.1	Wide / Unit (6490)	70	20	6.45	2	Positive
PIRIMICARB	No	239	Wide / Unit (6490)	182.1	Wide / Unit (6490)	90	15	6.45	2	Positive
PIRIMICARB	No	239	Wide / Unit (6490)	72.1	Wide / Unit (6490)	90	20	6.45	2	Positive
METHIOCARB SULFOXIDO	No	242.1	Wide / Unit (6490)	185.1	Wide / Unit (6490)	70	10	6.46	2	Positive
METHIOCARB SULFOXIDO	No	242.1	Wide / Unit (6490)	122.1	Wide / Unit (6490)	70	25	6.46	2	Positive
FLONICAMID	No	230.1	Wide / Unit (6490)	148	Wide / Unit (6490)	110	35	7.15	2	Positive
FLONICAMID	No	230.1	Wide / Unit (6490)	98.1	Wide / Unit (6490)	110	35	7.15	2	Positive
CARBOFURAN 3-0H	No	238	Wide / Unit (6490)	181.1	Wide / Unit (6490)	70	5	7.39	2	Positive
CARBOFURAN 3-0H	No	238	Wide / Unit (6490)	163.1	Wide / Unit (6490)	70	10	7.39	2	Positive
CLOTHIANIDIN	No	249.9	Wide / Unit (6490)	169.1	Wide / Unit (6490)	90	10	7.42	2	Positive
CLOTHIANIDIN	No	249.9	Wide / Unit (6490)	131.9	Wide / Unit (6490)	90	15	7.42	2	Positive
ETHIOFENCARB SULFONE	No	258	Wide / Unit (6490)	201	Wide / Unit (6490)	90	5	7.5	2	Positive
ETHIOFENCARB SULFONE	No	258	Wide / Unit (6490)	107	Wide / Unit (6490)	90	15	7.5	2	Positive
FENURON	No	165.2	Unit/Enh (6490)	120	Unit/Enh (6490)	90	13	7.59	2	Positive
FENURON	No	165.2	Wide / Unit (6490)	72	Wide / Unit (6490)	90	13	7.59	2	Positive
IMIDACLOPRID	No	256.1	Wide / Unit (6490)	209	Wide / Unit (6490)	90	15	7.67	2	Positive
IMIDACLOPRID	No	256.1	Wide / Unit (6490)	175.2	Wide / Unit (6490)	90	15	7.67	2	Positive
ACETAMIPRID	No	223.1	Wide / Unit (6490)	126	Wide / Unit (6490)	90	20	8.024	2	Positive
ACETAMIPRID	No	223.1	Wide / Unit (6490)	56.1	Wide / Unit (6490)	90	15	8.024	2	Positive
DIOXACARB	No	223.9	Wide / Unit (6490)	167	Wide / Unit (6490)	70	10	8.21	2	Positive
DIOXACARB	No	223.9	Wide / Unit (6490)	123	Wide / Unit (6490)	70	15	8.21	2	Positive
METHIOCARB SULFONE	No	275.1	Wide / Unit (6490)	201.1	Wide / Unit (6490)	70	10	8.85	2	Positive

CYMOXANILO	No	199.1	Wide / Unit (6490)	128	Wide / Unit (6490)	70	5	8.93	2	Positive
CYMOXANILO	No	199.1	Unit/Enh (6490)	111	Unit/Enh (6490)	70	15	8.93	2	Positive
IMAZALIL	No	297.1	Wide / Unit (6490)	255	Wide / Unit (6490)	110	15	8.99	2	Positive
IMAZALIL	No	297.1	Wide / Unit (6490)	159	Wide / Unit (6490)	110	20	8.99	2	Positive
TIACLOPRID	No	253.1	Wide / Unit (6490)	186	Wide / Unit (6490)	110	10	9.09	2	Positive
TIACLOPRID	No	253.1	Wide / Unit (6490)	126	Wide / Unit (6490)	110	20	9.09	2	Positive
METOXURON	No	229.1	Unit/Enh (6490)	156.2	Unit/Enh (6490)	110	25	9.11	2	Positive
METOXURON	No	229.1	Wide / Unit (6490)	72	Wide / Unit (6490)	110	25	9.11	2	Positive
ALDICARB	No	116	Wide / Unit (6490)	89	Wide / Unit (6490)	70	5	9.59	2	Positive
ALDICARB	No	116	Wide / Unit (6490)	70.1	Wide / Unit (6490)	70	5	9.59	2	Positive
OXADIXIL	No	279	Wide / Unit (6490)	219	Wide / Unit (6490)	90	10	9.67	2	Positive
OXADIXIL	No	279	Wide / Unit (6490)	133	Wide / Unit (6490)	90	20	9.67	2	Positive
MONURON	No	199.1	Wide / Unit (6490)	126.1	Wide / Unit (6490)	90	25	9.8	2	Positive
MONURON	No	199.1	Wide / Unit (6490)	72.1	Wide / Unit (6490)	90	20	9.8	2	Positive
SIMAZINA	No	202	Wide / Unit (6490)	132	Wide / Unit (6490)	110	25	9.83	2	Positive
SIMAZINA	No	202	Wide / Unit (6490)	104	Wide / Unit (6490)	110	29	9.83	2	Positive
METAMITRON	No	202.9	Wide / Unit (6490)	175	Wide / Unit (6490)	110	15	9.88	2	Positive
METAMITRON	No	202.9	Wide / Unit (6490)	103.9	Wide / Unit (6490)	110	25	9.88	2	Positive
THIODICARB	No	354.9	Wide / Unit (6490)	108	Wide / Unit (6490)	90	10	9.997	2	Positive
THIODICARB	No	354.9	Wide / Unit (6490)	88	Wide / Unit (6490)	90	15	9.997	2	Positive
FENPROPIMORF	No	304.4	Wide / Unit (6490)	147	Wide / Unit (6490)	90	30	10.39	2	Positive
FENPROPIMORF	No	304.4	Wide / Unit (6490)	130.1	Wide / Unit (6490)	90	25	10.39	2	Positive
SPIROXAMINE	No	298.2	Wide / Unit (6490)	144.1	Wide / Unit (6490)	130	20	10.45	2	Positive
SPIROXAMINE	No	298.2	Wide / Unit (6490)	100.1	Wide / Unit (6490)	130	35	10.45	2	Positive
CLORSULFURON	No	358	Wide / Unit (6490)	167.1	Wide / Unit (6490)	110	15	10.68	2	Positive
CLORSULFURON	No	358	Wide / Unit (6490)	141.1	Wide / Unit (6490)	110	15	10.68	2	Positive
FENTIN-HYDROXIDE	No	350.9	Wide / Unit (6490)	196.9	Wide / Unit (6490)	200	30	10.887	2	Positive
FENTIN-HYDROXIDE	No	350.9	Wide / Unit (6490)	119.9	Wide / Unit (6490)	200	40	10.887	2	Positive

PROPOXUR	No	210	Wide / Unit (6490)	168	Wide / Unit (6490)	70	2	10.9	2	Positive
PROPOXUR	No	210	Wide / Unit (6490)	111	Wide / Unit (6490)	70	10	10.9	2	Positive
CLOROTOLURON	No	213.1	Unit/Enh (6490)	140.1	Unit/Enh (6490)	90	20	10.93	2	Positive
CLOROTOLURON	No	213.1	Wide / Unit (6490)	72	Wide / Unit (6490)	90	20	10.93	2	Positive
CARBOFURAN	No	222	Wide / Unit (6490)	136.9	Wide / Unit (6490)	70	20	10.96	2	Positive
CARBOFURAN	No	222	Wide / Unit (6490)	123	Wide / Unit (6490)	70	15	10.96	2	Positive
SPINOSYN-A	No	732	Wide / Unit (6490)	141.9	Wide / Unit (6490)	130	30	11	2	Positive
SPINOSYN-A	No	732	Wide / Unit (6490)	97.9	Wide / Unit (6490)	130	40	11	2	Positive
BENDIOCARB	No	223.8	Wide / Unit (6490)	167	Wide / Unit (6490)	70	10	11.04	2	Positive
BENDIOCARB	No	223.8	Wide / Unit (6490)	109	Wide / Unit (6490)	70	15	11.04	2	Positive
FLUOMETURON	No	233.2	Unit/Enh (6490)	160	Unit/Enh (6490)	90	20	11.22	2	Positive
FLUOMETURON	No	233.2	Wide / Unit (6490)	72	Wide / Unit (6490)	90	20	11.22	2	Positive
BENTAZONA	No	240.9	Wide / Unit (6490)	198.9	Wide / Unit (6490)	70	10	11.31	2	Positive
BENTAZONA	No	240.9	Wide / Unit (6490)	107	Wide / Unit (6490)	70	25	11.31	2	Positive
DIFENOXURON	No	287.2	Wide / Unit (6490)	123.1	Wide / Unit (6490)	110	20	11.32	2	Positive
DIFENOXURON	No	287.2	Wide / Unit (6490)	72	Wide / Unit (6490)	110	25	11.32	2	Positive
CARBARYL	No	202	Wide / Unit (6490)	145	Wide / Unit (6490)	70	10	11.35	2	Positive
CARBARYL	No	202	Wide / Unit (6490)	127	Wide / Unit (6490)	70	25	11.35	2	Positive
ATRAZINA	No	216	Wide / Unit (6490)	174	Wide / Unit (6490)	110	20	11.38	2	Positive
ATRAZINA	No	216	Wide / Unit (6490)	68	Wide / Unit (6490)	110	35	11.38	2	Positive
ISOPROTURON	No	207.2	Unit/Enh (6490)	165.1	Unit/Enh (6490)	110	10	11.39	2	Positive
ISOPROTURON	No	207.2	Wide / Unit (6490)	72	Wide / Unit (6490)	110	20	11.39	2	Positive
METALAXYL-M	No	280.1	Wide / Unit (6490)	220	Wide / Unit (6490)	90	10	11.4	2	Positive
METALAXYL-M	No	280.1	Wide / Unit (6490)	159.9	Wide / Unit (6490)	90	20	11.4	2	Positive
TRIFORINE	No	389.8	Wide / Unit (6490)	215	Wide / Unit (6490)	130	20	11.45	2	Positive
TRIFORINE	No	389.8	Wide / Unit (6490)	98.1	Wide / Unit (6490)	130	25	11.45	2	Positive
PROMETRINA	No	242.1	Wide / Unit (6490)	158.1	Wide / Unit (6490)	90	20	11.46	2	Positive
DIURON	No	233	Unit/Enh (6490)	160	Unit/Enh (6490)	90	25	11.51	2	Positive

DIURON	No	233	Wide / Unit (6490)	72	Wide / Unit (6490)	90	25	11.51	2	Positive
EMA B1b	No	872.6	Wide / Unit (6490)	126.1	Wide / Unit (6490)	130	45	11.57	2	Positive
EMA B1b	No	872.6	Wide / Unit (6490)	82	Wide / Unit (6490)	130	50	11.57	2	Positive
SPINOSYN-D	No	746	Wide / Unit (6490)	141.9	Wide / Unit (6490)	130	30	11.57	2	Positive
SPINOSYN-D	No	746	Wide / Unit (6490)	97.7	Wide / Unit (6490)	130	40	11.57	2	Positive
DODINE	No	228	Wide / Unit (6490)	57.1	Wide / Unit (6490)	130	25	11.64	5	Positive
DODINE	No	228	Wide / Unit (6490)	43.1	Wide / Unit (6490)	130	30	11.64	5	Positive
MONOLINURON	No	215.1	Wide / Unit (6490)	148.2	Wide / Unit (6490)	70	10	11.77	2	Positive
MONOLINURON	No	215.1	Wide / Unit (6490)	126.1	Wide / Unit (6490)	70	20	11.77	2	Positive
EMA B1a	No	886.6	Wide / Unit (6490)	126.1	Wide / Unit (6490)	130	45	12.06	2	Positive
EMA B1a	No	886.6	Wide / Unit (6490)	82	Wide / Unit (6490)	130	50	12.06	2	Positive
DIMETHOMORF	No	388.1	Wide / Unit (6490)	301	Wide / Unit (6490)	130	20	12.1	2	Positive
DIMETHOMORF	No	388.1	Wide / Unit (6490)	165	Wide / Unit (6490)	130	25	12.1	2	Positive
METOBROMURON	No	259	Wide / Unit (6490)	170	Wide / Unit (6490)	70	20	12.12	2	Positive
METOBROMURON	No	259	Wide / Unit (6490)	148.1	Wide / Unit (6490)	70	15	12.12	2	Positive
TRIDEMORF	No	298.2	Wide / Unit (6490)	130.1	Wide / Unit (6490)	110	25	12.2	4	Positive
TRIDEMORF	No	298.2	Wide / Unit (6490)	98	Wide / Unit (6490)	110	30	12.2	4	Positive
BUTURON	No	237.1	Wide / Unit (6490)	126	Wide / Unit (6490)	110	30	12.62	2	Positive
BUTURON	No	237.1	Wide / Unit (6490)	84	Wide / Unit (6490)	110	15	12.62	2	Positive
PHENMEDIPHAM	No	318.1	Wide / Unit (6490)	168	Wide / Unit (6490)	70	10	12.7	2	Positive
PHENMEDIPHAM	No	318.1	Wide / Unit (6490)	136	Wide / Unit (6490)	70	25	12.7	2	Positive
CLOROXURON	No	291.1	Wide / Unit (6490)	218	Wide / Unit (6490)	110	25	12.99	2	Positive
CLOROXURON	No	291.1	Wide / Unit (6490)	72	Wide / Unit (6490)	110	20	12.99	2	Positive
ISOCARBOFOS	No	272.9	Wide / Unit (6490)	230.9	Wide / Unit (6490)	70	5	13.02	2	Positive
ISOCARBOFOS	No	272.9	Wide / Unit (6490)	121	Wide / Unit (6490)	70	25	13.02	2	Positive
METHIOCARB	No	225.9	Wide / Unit (6490)	169	Wide / Unit (6490)	90	5	13.05	2	Positive
METHIOCARB	No	225.9	Wide / Unit (6490)	121	Wide / Unit (6490)	90	20	13.05	2	Positive
CLETHODIM	No	359.9	Wide / Unit (6490)	268.1	Wide / Unit (6490)	110	10	13.15	2	Positive

CLETHODIM	No	359.9	Wide / Unit (6490)	164.1	Wide / Unit (6490)	110	20	13.15	2	Positive
DIETHOFENCARB	No	268.1	Wide / Unit (6490)	226.1	Wide / Unit (6490)	90	5	13.16	2	Positive
DIETHOFENCARB	No	268.1	Wide / Unit (6490)	180.1	Wide / Unit (6490)	90	15	13.16	2	Positive
IPROVALICARB	No	321.2	Wide / Unit (6490)	203.1	Wide / Unit (6490)	90	5	13.27	2	Positive
IPROVALICARB	No	321.2	Wide / Unit (6490)	119.1	Wide / Unit (6490)	90	15	13.27	2	Positive
EPOXYCONAZOLE	No	330	Wide / Unit (6490)	121.1	Wide / Unit (6490)	110	20	13.29	2	Positive
EPOXYCONAZOLE	No	330	Wide / Unit (6490)	101	Wide / Unit (6490)	110	35	13.29	2	Positive
LINURON	No	249.1	Wide / Unit (6490)	182	Wide / Unit (6490)	70	15	13.31	2	Positive
LINURON	No	249.1	Wide / Unit (6490)	160	Wide / Unit (6490)	70	15	13.31	2	Positive
AZOXISTROBIM	No	404	Wide / Unit (6490)	372.2	Wide / Unit (6490)	110	10	13.35	2	Positive
AZOXISTROBIM	No	404	Wide / Unit (6490)	344	Wide / Unit (6490)	110	20	13.35	2	Positive
FENHEXAMIDE	No	302.1	Wide / Unit (6490)	97.1	Wide / Unit (6490)	130	25	13.52	2	Positive
FENHEXAMIDE	No	302.1	Unit/Enh (6490)	55.1	Unit/Enh (6490)	130	35	13.52	2	Positive
CLORBROMURON	No	295	Wide / Unit (6490)	205.9	Wide / Unit (6490)	90	15	13.54	2	Positive
CLORBROMURON	No	295	Wide / Unit (6490)	182	Wide / Unit (6490)	90	15	13.54	2	Positive
PROMECARB	No	207.9	Wide / Unit (6490)	151.1	Wide / Unit (6490)	70	10	13.54	2	Positive
PROMECARB	No	207.9	Wide / Unit (6490)	109	Wide / Unit (6490)	70	15	13.54	2	Positive
BROMUCONAZOLE	No	377.9	Wide / Unit (6490)	161	Wide / Unit (6490)	110	30	13.55	2	Positive
BROMUCONAZOLE	No	377.9	Wide / Unit (6490)	159	Wide / Unit (6490)	110	35	13.55	2	Positive
BOSCALID	No	342.9	Wide / Unit (6490)	306.9	Wide / Unit (6490)	130	20	13.55	2	Positive
BOSCALID	No	342.9	Wide / Unit (6490)	139.9	Wide / Unit (6490)	130	20	13.55	2	Positive
FENBUCONAZOLE	No	337	Wide / Unit (6490)	125	Wide / Unit (6490)	130	25	13.93	2	Positive
FENBUCONAZOLE	No	337	Wide / Unit (6490)	70	Wide / Unit (6490)	130	20	13.93	2	Positive
MEPANIPYRIM	No	223.9	Wide / Unit (6490)	106	Wide / Unit (6490)	130	25	14.032	2	Positive
MEPANIPYRIM	No	223.9	Wide / Unit (6490)	77.1	Wide / Unit (6490)	130	50	14.032	2	Positive
DIFLUBENZURON	No	311	Wide / Unit (6490)	158	Wide / Unit (6490)	90	12	14.06	2	Positive
DIFLUBENZURON	No	311	Unit/Enh (6490)	141	Unit/Enh (6490)	90	25	14.06	2	Positive
METHOXYFENOZIDE	No	368.9	Wide / Unit (6490)	149	Wide / Unit (6490)	90	10	14.08	2	Positive

METHOXYFENOZIDE	No	368.9	Wide / Unit (6490)	133	Wide / Unit (6490)	90	30	14.08	2	Positive
HALOXYFOP	No	361.8	Wide / Unit (6490)	315.9	Wide / Unit (6490)	130	15	14.216	2	Positive
HALOXYFOP	No	361.8	Wide / Unit (6490)	91	Wide / Unit (6490)	130	25	14.216	2	Positive
ROTENONA	No	395.2	Wide / Unit (6490)	192.1	Wide / Unit (6490)	90	20	14.23	2	Positive
ROTENONA	No	395.2	Unit/Enh (6490)	139.2	Unit/Enh (6490)	90	20	14.23	2	Positive
MEPRONIL	No	270	Wide / Unit (6490)	228	Wide / Unit (6490)	110	10	14.25	2	Positive
MEPRONIL	No	270	Wide / Unit (6490)	119	Wide / Unit (6490)	110	25	14.25	2	Positive
FENOXYCARB	No	302.1	Wide / Unit (6490)	116	Wide / Unit (6490)	70	10	14.26	2	Positive
FENOXYCARB	No	302.1	Wide / Unit (6490)	88	Wide / Unit (6490)	70	15	14.26	2	Positive
DITALIMFOS	No	299.9	Wide / Unit (6490)	244	Wide / Unit (6490)	110	10	14.56	2	Positive
DITALIMFOS	No	299.9	Wide / Unit (6490)	148.1	Wide / Unit (6490)	110	15	14.56	2	Positive
DINICONAZOLE	No	326	Unit/Enh (6490)	159	Unit/Enh (6490)	130	40	14.66	2	Positive
DINICONAZOLE	No	326	Wide / Unit (6490)	70	Wide / Unit (6490)	130	35	14.66	2	Positive
NEBURON	No	275	Unit/Enh (6490)	114.1	Unit/Enh (6490)	110	10	14.79	2	Positive
NEBURON	No	275	Wide / Unit (6490)	88.1	Wide / Unit (6490)	110	15	14.79	2	Positive
TEBUFENOZIDE	No	352.9	Wide / Unit (6490)	297.1	Wide / Unit (6490)	90	5	14.88	2	Positive
TEBUFENOZIDE	No	352.9	Wide / Unit (6490)	133	Wide / Unit (6490)	90	15	14.88	2	Positive
TRIFLUMURON	No	359	Unit/Enh (6490)	156	Unit/Enh (6490)	110	15	15.06	2	Positive
TRIFLUMURON	No	359	Wide / Unit (6490)	139.1	Wide / Unit (6490)	110	25	15.06	2	Positive
CYAZOFAMID	No	324.9	Wide / Unit (6490)	260.9	Wide / Unit (6490)	90	5	15.1	2	Positive
CYAZOFAMID	No	324.9	Wide / Unit (6490)	108	Wide / Unit (6490)	90	10	15.1	2	Positive
DICHLOFLUANID [M+NH4]	No	350	Wide / Unit (6490)	223.9	Wide / Unit (6490)	80	10	15.29	5	Positive
DICHLOFLUANID [M+NH4]	No	350	Wide / Unit (6490)	123	Wide / Unit (6490)	80	20	15.29	5	Positive
FAMOXADONE	No	331	Wide / Unit (6490)	238	Wide / Unit (6490)	150	10	15.42	2	Positive
FAMOXADONE	No	331	Unit/Enh (6490)	93.1	Unit/Enh (6490)	150	35	15.42	2	Positive
TRIPHENYL PHOSPHATE	Yes	327.1	Wide / Unit (6490)	215	Wide / Unit (6490)	90	35	15.465	2	Positive
TRIPHENYL PHOSPHATE	Yes	327.1	Wide / Unit (6490)	152.1	Wide / Unit (6490)	90	35	15.465	2	Positive
HEXAFLUMURON	No	461	Wide / Unit (6490)	158	Wide / Unit (6490)	70	20	15.5	2	Positive
HEXAFLUMURON	No	461	Unit/Enh (6490)	141	Unit/Enh (6490)	70	15	15.5	2	Positive

PYRACLOSTROBINE	No	387.9	Wide / Unit (6490)	194	Wide / Unit (6490)	90	10	15.52	2	Positive
PYRACLOSTROBINE	No	387.9	Wide / Unit (6490)	163	Wide / Unit (6490)	90	25	15.52	2	Positive
CLOFENTEZIN	No	302.9	Wide / Unit (6490)	138	Wide / Unit (6490)	90	10	15.69	2	Positive
CLOFENTEZIN	No	302.9	Wide / Unit (6490)	102	Wide / Unit (6490)	90	40	15.69	2	Positive
ZOXAMIDA	No	338	Wide / Unit (6490)	188.9	Wide / Unit (6490)	110	20	15.7	2	Positive
ZOXAMIDA	No	338	Wide / Unit (6490)	160.9	Wide / Unit (6490)	110	45	15.7	2	Positive
CYANOFENFOS	No	304.1	Wide / Unit (6490)	275.9	Wide / Unit (6490)	110	10	15.75	2	Positive
CYANOFENFOS	No	304.1	Wide / Unit (6490)	156.9	Wide / Unit (6490)	110	25	15.75	2	Positive
BROMADIOLONE	No	510.9	Wide / Unit (6490)	276.9	Wide / Unit (6490)	110	20	15.8	2	Positive
BROMADIOLONE	No	510.9	Wide / Unit (6490)	250.9	Wide / Unit (6490)	110	20	15.8	2	Positive
TEFLUBENZURON	No	381	Wide / Unit (6490)	157.9	Wide / Unit (6490)	110	10	15.93	2	Positive
TEFLUBENZURON	No	381	Unit/Enh (6490)	140.9	Unit/Enh (6490)	110	25	15.93	2	Positive
ISOFENFOS METIL	No	272.9	Wide / Unit (6490)	230.9	Wide / Unit (6490)	70	5	15.94	2	Positive
ISOFENFOS METIL	No	272.9	Wide / Unit (6490)	121	Wide / Unit (6490)	70	25	15.94	2	Positive
THIOBENCARB	No	258	Wide / Unit (6490)	124.9	Wide / Unit (6490)	110	15	16	2	Positive
THIOBENCARB	No	258	Wide / Unit (6490)	100	Wide / Unit (6490)	110	10	16	2	Positive
DIFLUFENICAM	No	394.9	Wide / Unit (6490)	265.9	Wide / Unit (6490)	130	25	16.06	2	Positive
DIFLUFENICAM	No	394.9	Unit/Enh (6490)	245.9	Unit/Enh (6490)	130	30	16.06	2	Positive
TOLCLOFOS METHYL	No	300.9	Wide / Unit (6490)	268.9	Wide / Unit (6490)	110	15	16.07	2	Positive
TOLCLOFOS METHYL	No	300.9	Wide / Unit (6490)	174.9	Wide / Unit (6490)	110	25	16.07	2	Positive
INDOXACARB	No	528	Wide / Unit (6490)	203	Wide / Unit (6490)	90	40	16.16	2	Positive
INDOXACARB	No	528	Wide / Unit (6490)	55.9	Wide / Unit (6490)	90	30	16.16	2	Positive
LUFENURON	No	511	Wide / Unit (6490)	158.1	Wide / Unit (6490)	110	10	16.47	2	Positive
LUFENURON	No	511	Unit/Enh (6490)	141	Unit/Enh (6490)	110	10	16.47	2	Positive
TEBUFEMPIRATE	No	334.2	Wide / Unit (6490)	145.1	Wide / Unit (6490)	130	25	16.57	2	Positive
CYCLOXIDIM	No	326.1	Wide / Unit (6490)	180.5	Wide / Unit (6490)	110	15	16.63	2	Positive
ABAMECTINA B-1b	No	881.4	Wide / Unit (6490)	737.4	Wide / Unit (6490)	150	55	16.68	2	Positive
ABAMECTINA B-1b	No	881.4	Wide / Unit (6490)	183.1	Wide / Unit (6490)	150	65	16.68	2	Positive
PROSULFOCARB	No	252.1	Wide / Unit (6490)	128.2	Wide / Unit (6490)	90	15	16.89	2	Positive
PROSULFOCARB	No	252.1	Wide / Unit (6490)	91.2	Wide / Unit (6490)	90	15	16.89	2	Positive

FLUFENOXURON	No	489	Wide / Unit (6490)	158.1	Wide / Unit (6490)	90	25	16.91	2	Positive
FLUFENOXURON	No	489	Unit/Enh (6490)	141	Unit/Enh (6490)	90	25	16.91	2	Positive
BENFURACARB	No	410.9	Wide / Unit (6490)	251.7	Wide / Unit (6490)	110	10	17.1	2	Positive
BENFURACARB	No	410.9	Wide / Unit (6490)	194.8	Wide / Unit (6490)	110	20	17.1	2	Positive
FURATHIOCARB	No	382.9	Wide / Unit (6490)	252.1	Wide / Unit (6490)	110	10	17.1	2	Positive
FURATHIOCARB	No	382.9	Wide / Unit (6490)	195.1	Wide / Unit (6490)	110	15	17.1	2	Positive
ABAMECTINA B-1a	No	895.5	Wide / Unit (6490)	751.4	Wide / Unit (6490)	150	45	17.53	2	Positive
ABAMECTINA B-1a	No	895.5	Wide / Unit (6490)	449.2	Wide / Unit (6490)	150	55	17.53	2	Positive
FENPIROXIMATE	No	422.2	Wide / Unit (6490)	366.2	Wide / Unit (6490)	130	20	17.55	2	Positive
FENPIROXIMATE	No	422.2	Wide / Unit (6490)	138.1	Wide / Unit (6490)	130	20	17.55	2	Positive
OXADIAZON	No	345	Wide / Unit (6490)	303	Wide / Unit (6490)	140	10	17.58	2	Positive
OXADIAZON	No	345	Wide / Unit (6490)	219.9	Wide / Unit (6490)	140	20	17.58	2	Positive
BRODIFACOUM	No	524.9	Wide / Unit (6490)	336.9	Wide / Unit (6490)	130	20	17.6	2	Positive
BRODIFACOUM	No	524.9	Wide / Unit (6490)	177.9	Wide / Unit (6490)	130	35	17.6	2	Positive
HEXITIAZOX	No	353.1	Wide / Unit (6490)	227.8	Wide / Unit (6490)	110	15	17.69	2	Positive
HEXITIAZOX	No	353.1	Wide / Unit (6490)	168.1	Wide / Unit (6490)	110	25	17.69	2	Positive
ETOXAZOLE	No	360	Wide / Unit (6490)	141	Wide / Unit (6490)	130	35	17.74	2	Positive
ETOXAZOLE	No	360	Wide / Unit (6490)	112.9	Wide / Unit (6490)	130	70	17.74	2	Positive
PROPARGITE	No	368.1	Wide / Unit (6490)	231.1	Wide / Unit (6490)	90	5	17.8	2	Positive
PROPARGITE	No	368.1	Wide / Unit (6490)	175.1	Wide / Unit (6490)	90	10	17.8	2	Positive
FENAZAQUIM	No	307.1	Wide / Unit (6490)	161.1	Wide / Unit (6490)	110	15	17.81	2	Positive
FENAZAQUIM	No	307.1	Wide / Unit (6490)	147.1	Wide / Unit (6490)	110	15	17.81	2	Positive
SPIROMESIFEN	No	273.1	Wide / Unit (6490)	255	Wide / Unit (6490)	110	10	18.7	2	Positive
SPIROMESIFEN	No	273.1	Wide / Unit (6490)	187	Wide / Unit (6490)	110	15	18.7	2	Positive
SPIRODICLOFEN	No	411	Wide / Unit (6490)	313	Wide / Unit (6490)	110	5	18.75	2	Positive
SPIRODICLOFEN	No	411	Wide / Unit (6490)	71.2	Wide / Unit (6490)	110	15	18.75	2	Positive
ETOFENPROX [M+NH4]	No	394.1	Wide / Unit (6490)	177.2	Wide / Unit (6490)	70	15	19	2	Positive
ETOFENPROX [M+NH4]	No	394.1	Wide / Unit (6490)	135.1	Wide / Unit (6490)	70	20	19	2	Positive
FENBUTATIN OXIDO	No	518.9	Wide / Unit (6490)	196.7	Wide / Unit (6490)	230	65	21.28	4	Positive
FENBUTATIN OXIDO	No	518.9	Wide / Unit (6490)	90.8	Wide / Unit (6490)	230	65	21.28	4	Positive

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