

Pesticide Residues – Animal Products / Fats and Oils

The pesticide residues proficiency tests are separated according to the matrix-pesticide analytical compatibility. This series of proficiency tests is for fat-soluble pesticides which may typically be found in fats, oils and animal products. The majority of the pesticides are spiked into the material, occasionally elevating incurred low levels of pesticides. The same blank material is available for purchase so that participating laboratories can correctly matrix-match calibration standards or for other quality control purposes.

Most of these proficiency tests are semi-blind, i.e. they incorporate both identification and quantification of a analytes from a given list of potential residues. The proficiency test reports include additional residues reported by participants and highlight where required residues were not detected.

The residue definitions, reporting requirements and quality control specifications are derived from EU legislation and guidance.

Each test material will contain any number of pesticides. Refer to the relevant tables below for the full lists of potential residues in a test material.

Please note:

The omission of item code 05134 is deliberate because this number was allocated to an extra test that was added to last year's programme.

Blank matrix test materials can ONLY be purchased if the corresponding test is ordered.

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
16/01/2019	FCPM10-INF10	05132	infant formula (powdered)	pesticides (fat soluble & EU 'red list')	50 g	190
	BLPM10-INF5	05132b	blank infant formula (powdered)		50 g	57
04/03/2019	FCPM9-EGG2	05133	chicken (hens) eggs	pesticides (fat soluble)	50 g	190
	BLPM9-EGG1	05133b	blank chicken (hens) eggs		50 g	57
28/05/2019	FCPM9-SEA18	05135	oily fish	pesticides (fat soluble)	50 g	198
	BLPM9-SEA3	05135b	blank oily fish		50 g	59
31/07/2019	FCPM9-DRY14	05136	milk powder	pesticides (fat soluble)	50 g	198
	BLPM9-DRY2	05136b	blank milk powder		50 g	59
17/09/2019	FCPM9-FAT2	05137	animal fat (pork)	pesticides (fat soluble)	50 g	198
	BLPM9-FAT3	05137b	blank animal fat (pork)		50 g	59



Pesticide Residues – Animal Products / Fats and Oils (continued)

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
09/10/2019	FCPM2-OIL34	05138	olive oil (virgin)	pesticides (multi-residue)	50 g	198
	BLPM2-OIL36	05138b	blank olive oil (virgin)		50 g	59
26/11/2019	FCMS1-SEA20	05139	prawns	quaternary ammonium compounds	50 g	198
	BLMS1-SEA4	05139b	blank prawns		50 g	59
15/01/2020	FCPM10-INF10	05140	infant formula	pesticides (fat soluble) AND perchlorate	50 g	198
	BLPM10-INF5	05140b	blank infant formula		50 g	59
02/03/2020	FCPM9-EGG2	05141	chicken (hens) eggs	pesticides (fat soluble) AND (recommended monitoring)	50 g	198
	BLPM9-EGG1	05141b	blank chicken (hens) eggs		50 g	59



Potential Pesticide Residues and PCBs – Fat Soluble

Parent compound only unless otherwise stated

aldrin	cypermethrin (sum of constituent isomers)	endrin	indoxacarb (sum of indoxacarb and its R enantiomer)	spinosad (sum of spinosyn A and D)
azinphos-ethyl	DDD-pp (TDE)	famoxadone	methidathion	tecnazene
bifenthrin	DDE-pp	fenthion (parent)	methoxychlor	triazophos
chlordane (cis)	DDT-op	fenvalerate	parathion (ethyl)	vinclozolin
		(sum of constituent isomers in any ratio including esfenvalerate)		
chlordane (oxy)	DDT-pp	HCB (hexachlorobenzene)	parathion-methyl	PCB 28
chlordane (trans)	deltamethrin	HCH-A	pendimethalin	PCB 52
		(alpha hexachlorocyclohexane)		
chlorfenvinphos (sum of E and Z isomers)	diazinon	HCH-B	permethrin (sum of isomers)	PCB 101
		(beta hexachlorocyclohexane)		
chlorpyrifos (ethyl)	dieldrin	HCH-G	pirimiphos-methyl	PCB 118
		(gamma hexachlorocyclohexane / lindane)		
chlorpyrifos-methyl	endosulfan I (alpha)	heptachlor	profenofos	PCB 138
cyfluthrin	endosulfan II (beta)	heptachlor-epoxide (cis)	pyrazophos	PCB 153
(sum of constituent isomers)				
cyhalothrin-lambda	endosulfan-sulfate	heptachlor-epoxide (trans)	quintozene	PCB 180

Potential Pesticide Residues – EU ‘Red List’

Low level, based on EU-MRLs. Parent compound only unless otherwise stated

cadusafos	fensulfothion-oxon-sulfone
demeton-S-methyl-sulfone	fensulfothion-sulfone
demeton-S-methyl-sulfoxide (oxydemeton-methyl)	fentin (as triphenyltin cation)
diphenylamine	fipronil (parent)
disulfoton	haloxyfop (free acid)
disulfoton-sulfone	nitrofen
disulfoton-sulfoxide	omethoate
ethoprophos	terbufos
fensulfothion	terbufos-sulfone
fensulfothion-oxon	terbufos-sulfoxide

Potential Pesticide Residues – Quaternary Ammonium Compounds

BAC 10 (Benzyldimethyldecylammonium Chloride)	BAC 16 (Benzyldimethylhexadecylammonium Chloride)
BAC 12 (Benzyldimethyldodecylammonium Chloride)	DDAC (Didecyldimethylammonium Chloride)
BAC 14 (Benzyldimethyltetradecylammonium Chloride)	

Potential Pesticide Residues – Recommended Monitoring

abamectin (sum of avermectin B1a and B1b only)	fipronil (parent)
amitraz (sum of amitraz and all metabolites containing the 2,4-DMA moiety)	fipronil-desulfinyl
bifenthrin	fipronil-sulfone
cypermethrin (sum of constituent isomers)	flufenoxuron
diazinon	pyridaben
dichlorvos	pyriproxyfen
etoxazole	thiamethoxam



Pesticide Residues – Cereals

The pesticide residues proficiency tests are separated according to the matrix-pesticide analytical compatibility. This series of proficiency tests is for fat-soluble and water-soluble pesticides which may typically be found in cereals or their products. The majority of the pesticides are spiked into the material, occasionally elevating incurred low levels of pesticides. The same blank material is available for purchase so that participating laboratories can correctly matrix-match calibration standards or for other quality control purposes.

Most of these proficiency tests are semi-blind, i.e. they incorporate both identification and quantification of a analytes from a given list of potential residues. The proficiency test reports include additional residues reported by participants and highlight where required residues were not detected. Some of the proficiency tests are target analyte specific where single residue methods are generally applied.

The residue definitions, reporting requirements and quality control specifications are derived from EU legislation and guidance.

Each test material will contain any number of pesticides. Refer to the relevant tables below for the full lists of potential residues in a test material

Blank matrix test materials can ONLY be purchased if the corresponding test is ordered.

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
30/01/2019	FCPM2-CCP51	09120	basmati rice	pesticides (multi-residue)	50 g	181
	BLPM2-CCP52	09120b	blank basmati rice		50 g	51
14/02/2019	FCPM2-CCP49	09121	wheat flour	pesticides (multi-residue)	50 g	181
	BLPM2-CCP11	09121b	blank wheat flour		50 g	51
03/05/2019	FCMS2-CCP39	09122	oats	chlormequat, mepiquat, glyphosate	100 g	188
	BLMS2-CCP9	09122b	blank oats		100 g	59
13/06/2019	FCPM2-CCP14	09123	brown rice	pesticides (multi-residue)	50 g	188
	BLPM2-CCP5	09123b	blank brown rice		50 g	59
14/08/2019	FCPM2-CCP49	09124	wheat flour	pesticides (multi-residue)	50 g	188
	BLPM2-CCP11	09124b	blank wheat flour		50 g	59
13/09/2019	FCPM2-VEG86	09125	lentils	pesticides (multi-residue)	50 g	188
	BLPM2-VEG87	09125b	blank lentils		50 g	59



Pesticide Residues – Cereals (continued)

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
16/10/2019	FCPM2-AFE1	09126	animal feed	pesticides (multi-residue)	50 g	188
	BLPM2-AFE4	09126b	blank animal feed		50 g	59
27/11/2019	FCMS2-CCP49	09127	wheat flour	chlormequat, mepiquat, glyphosate	100 g	188
	BLMS2-CCP11	09127b	blank wheat flour		100 g	59
29/01/2020	FCPM2-CCP51	09128	basmati rice	pesticides (multi-residue) AND bromide	50 g	188
	BLPM2-CCP52	09128b	blank basmati rice		50 g	59
13/02/2020	FCPM2-CCP49	09129	wheat flour	pesticides (multi-residue)	50 g	188
	BLPM2-CCP11	09129b	blank wheat flour		50 g	59



Potential Pesticides Residues – Multi-Residue

Parent compound only unless otherwise stated

2,4-D (free acid only)	DDD-pp (TDE)	fensulfothion	mepanipyrim	propiconazole
2-phenylphenol (ortho-phenylphenol) acephate	DDE-pp DDT-op	fensulfothion-oxon fensulfothion-oxon-sulfone	metaflumizone (sum of E and Z isomers) metalaxyl (sum of constituent isomers including metalaxyl-M)	propoxur propyzamide
acetamiprid	DDT-pp	fensulfothion-sulfone	metamitron	proquinazid
acetochlor	deltamethrin	fenthion (parent)	metconazole	prosulcarb
acrinathrin	demeton-S-methyl-sulfone	fenthion-sulfone	methacrifos	prothiofos
aldicarb	demeton-S-methyl-sulfoxide (oxydemeton-methyl)	fenthion-sulfoxide	methamidophos	pymetrozine
aldicarb-sulfone (aldoxycarb)	diafenthiuron	fenvalerate (sum of constituent isomers in any ratio including esfenvalerate)	methidathion	pyraclostrobin
aldicarb-sulfoxide	diazinon	fipronil (parent)	methiocarb	pyrazophos
aldrin	dichlorvos	fipronil-desulfinyl	methiocarb-sulfone	pyridaben
allethrin	dicloran	fipronil-sulfone	methiocarb-sulfoxide	pyridalyl
ametoctradin	dicofol (sum of p,p' and o,p' isomers)	flonicamid	methomyl	pyridaphenthion
atrazine	dicrotophos	fluazifop (sum of constituent isomers, esters and conjugates, expressed as fluazifop)	methoxychlor	pyrimethanil
azinphos-ethyl	dieldrin	flubendiamide	methoxyfenozide	pyriproxyfen
azinphos-methyl	diethofencarb	flucythrinate	metolachlor (sum of constituent isomers including S-metolachlor)	quinalphos
azoxystrobin	difenoconazole	fludioxonil	metrafenone	quinoxifen
benalaxyl	diflubenzuron	flufenoxuron	metribuzin	quintozene
bendiocarb	dimethoate	fluopicolide	mevinphos (sum of E and Z isomers)	spinosad (sum of spinosyn A and D)
bifenthrin	dimethomorph (sum of isomers)	fluopyram	monocrotophos	spirodiclofen
biphenyl	dimoxystrobin	fluquinconazole	monolinuron	spiromesifen
bitertanol	diniconazole	flusilazole	myclobutanil	spirotetramat (sum spirotetramat and spirotetramat-enol expressed as spirotetramat)
boscalid	dinotefuran	flutolanil	nitrofen	spiroxamine
bromophos-ethyl	diphenylamine	flutriafol	novaluron	tebuconazole
bromopropylate	disulfoton	fluvalinate (tau)	omethoate	tebufenozide
bromuconazole (sum of diastereoisomers)	disulfoton-sulfone	fonofos	oxadiazon	tebufenpyrad
bupirimate	disulfoton-sulfoxide	formothion	oxadixyl	tecnazene
buprofezin	diuron	fosthiazate	oxamyl	teflubenzuron
cadusafos	dodine	furathiocarb	oxyfluorfen	tefluthrin
carbaryl	endosulfan I (alpha)	HCB (hexachlorobenzene)	paclobutrazol	terbufos
carbendazim	endosulfan II (beta)	HCH-A (alpha hexachlorocyclohexane)	parathion (ethyl)	terbufos-sulfoxide
carbofuran	endosulfan-sulfate	HCH-B (beta hexachlorocyclohexane)	parathion-methyl	terbufos-sulfoxide



carbofuran (3-hydroxy)	endrin	HCH-G (gamma hexachlorocyclohexane / lindane)	penconazole	terbuthylazine
carboxin	EPN	heptachlor	pencycuron	tetrachlorvinphos
chlorantraniliprole (rynaxypyr)	epoxiconazole	heptachlor-epoxide (cis)	pendimethalin	tetraconazole
chlordane (cis)	ethiofencarb-sulfoxide	heptachlor-epoxide (trans)	pentachloroaniline	tetradifon
chlordane (trans)	ethion	heptenophos	permethrin (sum of isomers)	tetramethrin (sum of constituent isomers)
chlorfenapyr	ethirimol	hexaconazole	phenthoate	TFNA
chlorfenvinphos (sum of E and Z isomers)	ethoprophos	hexythiazox	phorate	TFNG
chloridazon	etofenprox	imazalil	phorate-sulfone	thiabendazole
chlorobenzilate	etoxazole	imidacloprid	phorate-sulfoxide	thiacloprid
chlorothalonil	etrimfos	indoxacarb (sum of indoxacarb and its R enantiomer)	phosalone	thiamethoxam
chlorpropham	famoxadone	iprodione	phosmet	thiodicarb
chlorpyrifos (ethyl)	fenamidone	iprovalicarb	phosphamidon	THPI
chlorpyrifos-methyl	fenamiphos	isocarbofos	phoxim	tolclofos-methyl
chlorthal-dimethyl	fenamiphos-sulfone	isofenphos (ethyl)	phthalamide	tolfenpyrad
clofentezine	fenamiphos-sulfoxide	isofenphos-methyl	piperonyl butoxide	tolylfluanid
clothianidin	fenarimol	isoprocarb	pirimicarb	triadimefon
coumaphos	fenazaquin	isoprothiolane	pirimicarb (desmethyl)	triadimenol
cyazofamid	fenbuconazole	isoproturon	pirimiphos-ethyl	triallate
cyflufenamid	fenbutatin oxide	kresoxim-methyl	pirimiphos-methyl	triazophos
cyfluthrin (sum of constituent isomers)	fenhexamid	lenacil	prochloraz (parent)	tricyclazole
cyhalothrin-lambda	fenitrothion	linuron	procymidone	trifloxystrobin
cymoxanil	fenoxycarb	lufenuron	profenofos	triflumuron
cypermethrin (sum of constituent isomers)	fenpropathrin	malaoxon	promecarb	trifluralin
cyproconazole	fenpropidin (sum of fenpropidin and its salts, expressed as fenpropidin)	malathion	prometryn	triticonazole
cyprodinil	fenpropimorph	mandipropamid	propamocarb	vinclozolin
cyromazine	fenpyroximate	mecarbam	propargite	zoxamide



Pesticide Residues – Fresh Fruits, Vegetables, Tea, Herbs & Honey

The pesticide residues proficiency tests are separated according to the matrix-pesticide analytical compatibility. This series of proficiency tests is for a large range of pesticides which may be found in a variety of fresh fruit, vegetables or their products. The majority of the pesticides are spiked into the material, occasionally elevating incurred low levels of pesticides. The same blank material is available for purchase so that participating laboratories can correctly matrix-match calibration standards or for other quality control purposes.

Most of these proficiency tests are semi-blind, i.e. they incorporate both identification and quantification of a analytes from a given list of potential residues. The proficiency test reports include additional residues reported by participants and highlight where required residues were not detected. Some of the proficiency tests are target analyte specific where single residue methods are generally applied.

The residue definitions, reporting requirements and quality control specifications are derived from EU legislation and guidance.

Each test material will contain any number of pesticides. Refer to the relevant tables above/below for the full lists of potential residues in a test material

Please note:

Some tests, e.g. those for dithiocarbamates, have a short timescale for the submission of results. The stability of such test materials will be assessed as part of the sample preparation procedures.

Blank matrix test materials can ONLY be purchased if the corresponding test is ordered.

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
08/01/2019	FCPM2-HON2	19263	honey	pesticide residues (multi-residue: honey matrix)	90 g	181
	BLPM2-HON1	19263b	blank honey		90 g	57
08/01/2019	FCPM2-VEG82	19264	mushroom purée	pesticides (multi-residue) AND chlormequat	90 g	181
	BLPM2-VEG85	19264b	blank mushroom purée		90 g	57
05/02/2019	FCPM2-VEG34	19265	cauliflower purée	actual pesticides (specified residues)	90 g	181
	BLPM2-VEG10	19265b	blank cauliflower purée		90 g	57
11/03/2019	FCPM2-FRU2	19266	apple	pesticides (multi-residues)	90 g	181
	BLPM2-FRU5	19266b	blank apple purée		90 g	57
02/04/2019	FCPM2-FRU58	19267	orange purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU22	19267b	blank orange purée		90 g	59



Pesticide Residues – Fresh Fruits, Vegetables, Tea, Herbs & Honey (continued)

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
13/05/2019	FCPM2-VEG76	19268	tomato purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG29	19268b	blank tomato purée		90 g	59
10/06/2019	FCPM2-VEG38	19269	cucumber purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG13	19269b	blank cucumber purée		90 g	59
10/06/2019	FCPM2-VEG49	19270	lettuce purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG18	19270b	blank lettuce purée		90 g	59
22/07/2019	FCPM6-VEG62	19271	salad leaves purée	pesticides (disinfection by-products)	90 g	188
	BLPM6-VEG24	19271b	blank salad leaves purée		90 g	59
22/07/2019	FCPM2-DRA13	19272	wine	pesticides (multi-residue)	90 ml	188
	BLPM2-DRA3	19272b	blank wine		90 ml	59
12/08/2019	FCPM2-FRU67	19273	strawberry purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU30	19273b	blank strawberry purée		90 g	59
27/08/2019	FCPM2-FRU69	19274	kiwi fruit purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU70	19274b	blank kiwi fruit purée		90 g	59
03/09/2019	FCPM2-VEG59	19275	potato purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG23	19275b	blank potato purée		90 g	59
16/09/2019	FCMS3-VEG49	19276	lettuce purée	dithiocarbamates	90 g	252
	BLMS3-VEG18	19276b	blank lettuce purée		90 g	77
16/09/2019	FCPM2-VEG80	19277	avocado purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG83	19277b	blank avocado purée		90 g	59
07/10/2019	FCPM2-FRU71	19278	raspberry purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU72	19278b	blank raspberry purée		90 g	59
22/10/2019	FCPM2-FRU59	19279	peach purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU23	19279b	blank peach purée		90 g	59
11/11/2019	FCMS4-FRU61	19280	pineapple purée	ethephon	90 g	252
	BLMS4-FRU25	19280b	blank pineapple purée		90 g	77



Pesticide Residues – Fresh Fruits, Vegetables, Tea, Herbs & Honey (continued)

dispatch date	product code	item code	matrix	analytes	approx. size	fee GBP
11/11/2019	FCPM2-VEG32	19281	cabbage purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG8	19281b	blank cabbage purée		90 g	59
05/12/2019	FCPM3-DRH14	19282	green tea	pesticides (multi-residue: tea matrix)	50 g	188
	BLPM3-DRH1	19282b	blank green tea		50 g	59
13/01/2020	FCPM2-HON2	19283	honey	pesticides (multi-residue: honey matrix)	90 g	188
	BLPM2-HON1	19283b	blank honey		90 g	59
13/01/2020	FCPM2-VEG72	19284	bell pepper purée	pesticides (multi-residue)	90 g	188
	BLPM2-VEG27	19284b	blank bell pepper purée		90 g	59
10/02/2020	FCPM2-VEG33	19285	carrot purée	specified pesticide residues	90 g	188
	BLPM2-VEG9	19285b	blank carrot purée		90 g	59
09/03/2020	FCPM2-FRU2	19286	apple purée	pesticides (multi-residue)	90 g	188
	BLPM2-FRU5	19286b	blank apple purée		90 g	59



Potential Pesticide Residues – Disinfection By-Products

BAC 10 (Benzyldimethyldecylammonium Chloride)	DDAC (Didecyldimethylammonium Chloride)
BAC 12 (Benzyldimethyldodecylammonium Chloride)	chlorate
BAC 14 (Benzyldimethyltetradecylammonium Chloride)	perchlorate
BAC 16 (Benzyldimethylhexadecylammonium Chloride)	

Potential Pesticide Residues – Multi-Residue: Tea Matrix

Parent compound only unless otherwise stated

2-phenylphenol (ortho-phenylphenol)	chlorpyrifos (ethyl)	dinotefuran	HCB (hexachlorobenzene)	phosalone
abamectin (sum of avermectin B1a and B1b only)	cyhalothrin-lambda	endosulfan I (alpha)	HCH-A (alpha hexachlorocyclohexane)	pirimiphos- methyl
acetamiprid	cypermethrin (sum of constituent isomers)	endosulfan II (beta)	HCH-B (beta hexachlorocyclohexane)	procymidone
anthraquinone	DDD-pp (TDE)	endosulfan-sulfate	HCH-G (gamma hexachlorocyclohexane / lindane)	propargite
bifenthrin	DDE-pp	ethion	imidacloprid	pyridaben
buprofezin	DDT-op	fenazaquin	linuron	pyrimethanil
carbaryl	DDT-pp	fenitrothion	malathion	quinalphos
carbendazim	deltamethrin	fenpropathrin	methomyl	terbutylazine
chlorfenapyr	diazinon	fenpropimorph	monocrotophos	tolfenpyrad
chlorfenvinphos (sum of E and Z isomers)	dicofol (sum of p,p' and o,p' isomers)	fenvalerate (sum of constituent isomers in any ratio including esfenvalerate)	oxadixyl	triazophos
chlorothalonil	dimethoate	fipronil-sulfone	phenthoate	trifloxystrobin

Potential Pesticide Residues – Multi-Residue: Honey Matrix

Parent compound only unless otherwise stated

acetamiprid	DMPF (N-2,4-dimethylphenylformamide)
amitraz (sum of amitraz and all metabolites containing the 2,4-DMA moiety)	fluvalinate (tau)
clothianidin	imidacloprid
coumaphos	nitenpyram
dinotefuran	thiacloprid
DMF (N-2,4-dimethylformamide)	thiamethoxam



Specified Pesticides Residues

Matrix *will* contain **ALL** of the pesticides listed in this table

Parent compound only unless otherwise stated

acetamiprid	cypermethrin (sum of constituent isomers)	endosulfan I (alpha)	fenthion-sulfoxide	malathion
aldrin	DDE-pp	endosulfan II (beta)	HCH-A (alpha hexachlorocyclohexane)	parathion-methyl
azoxystrobin	deltamethrin	endosulfan-sulfate	HCH-B (beta hexachlorocyclohexane)	permethrin (sum of isomers)
bifenthrin	dichlorvos	endrin	HCH-G (gamma hexachlorocyclohexane / lindane)	triazophos
chlorpyrifos (ethyl)	dieldrin	ethion		
chlorpyrifos-methyl	dimethoate	fenpropathrin		

