

PESTICIDE MULTIRESIDUE METHOD

SCOPE OF ACTIVE SUBSTANCES IN COMPLEX MATRICES (TEA, COCOA, COFFEE, HERBS, SPICES, FOOD SUPPLEMENTS)

substance name	limit of quantification (LOQ) [mg/kg]				
2	0.01	Captafol ²	0.01	Cyromazin ¹	0.01
		Captan ²	0.01		
1.4-Dimethylnaphthalene ²	0.01	Carbaryl ¹	0.01	D	
		Carbendazim (incl. Benomyl) ¹	0.01	Daminozide ¹	0.01
2.4-D ¹	0.01	Carbetamid ¹	0.01	DDD, o,p'- ^{1,2}	0.01
		Carbofuran (incl. Carbosulfan, Benfuracarb) ¹	0.005	DDD, p,p'- ^{1,2}	0.01
A	0.01	Carbofuran-3-hydroxy ¹	0.005	DDE, o,p'- ^{1,2}	0.01
		Carbophenothion (-ethyl) ²	0.01	DDE, p,p'- ^{1,2}	0.01
Acephate ^{1, 2}	0.01	Carbophenothion-methyl ²	0.01	DDT, o,p'- ^{1,2}	0.01
Acetamidiprid ¹	0.01	Carboxin ¹	0.01	DDT, p,p'- ^{1,2}	0.01
Acetochlor ¹	0.01	Chlorantraniliprole ¹	0.01	DEET (Diethyltoluamid) ¹	0.01
Acibenzolar-S-methyl ¹	0.01	Chlorbensid sulfone ²	0.01	Deltamethrin ²	0.01
Acionifen ²	0.01	Chlorbenside ²	0.01	Demeton-S-methyl ¹	0.01
Acrinathrin ²	0.01	Chlorbufam ¹	0.01	Demeton-S-methyl-sulfone ¹	0.01
Alachlor ²	0.01	Chlordane, cis- (alpha)- ²	0.01	Demeton-S-methyl-sulfoxide ¹	0.01
Aldicarb ¹	0.01	Chlordane, Oxy- ²	0.01	Desmedipham ¹	0.01
Aldicarb sulfone (Aldoxycarb) ¹	0.01	Chlordane, trans- (gamma)- ²	0.01	Desmetryne ¹	0.01
Aldicarb sulfoxide ¹	0.01	Chlorfenapyr ²	0.01	Di-allate ¹	0.01
Aldrin ²	0.01	Chlorfenprop-methyl ²	0.01	Diafenthion ¹	0.01
Allethrin ²	0.01	Chlorfenoson ²	0.01	Diazinon ²	0.01
Allethrin, d-trans- (Bioallethrin) ²	0.01	Chlorfenvinphos ²	0.01	Dichlobenil (2,6-Dichlorobenzonitrile, DCBN) ²	0.01
Ametoctradin ¹	0.01	Chloridazon (incl. Chloridazon-desphenyl) ¹	0.01	Dichlofenthion ²	0.01
Ametryn ¹	0.01	Chlormephos ²	0.01	Dichlofluanid ²	0.01
Amitraz (incl. rel. metabolites) ¹	0.01	Chlorobenzilate ²	0.01	Dichlorvos ²	0.01
Anilazine ¹	0.01	Chloroneb ²	0.01	Diclobutrazol ¹	0.01
Anthraquinone ²	0.01	Chloropropylate ²	0.01	Diclofop-methyl ¹	0.01
Atrazine ¹	0.01	Chlorothalonil ²	0.01	Dicloran ²	0.01
Avermectin B1a ¹	0.01	Chlorotoluron ¹	0.01	Dicofol (incl. 4,4'-Dichlorobenzophenone) ²	0.01
Avermectin B1b ¹	0.01	Chloroxuron ¹	0.01	Dicrotophos ²	0.01
Azaconazole ¹	0.01	Chlorpropham ²	0.01	Dieldrin ²	0.01
Azinphos-ethyl ¹	0.01	Chlorpyrifos (-ethyl) ²	0.01	Diethofencarb ¹	0.01
Azinphos-methyl ¹	0.01	Chlorpyrifos-methyl ²	0.01	Difenoconazole ¹	0.01
Azoxystrobin ¹	0.01	Chlorsulfuron ¹	0.01	Diflubenzuron ¹	0.01
B	0.01	Chlorthal-dimethyl ²	0.01	Diflufenican ²	0.01
		Chlorthiamid ¹	0.01	Dimethachlor ¹	0.01
Benalaxyl ¹	0.01	Chlorthion ²	0.01	Dimethoat ¹	0.01
Bendiocarb ¹	0.01	Chlorthiophos ²	0.01	Dimethomorph ¹	0.01
Benfluralin ²	0.01	Chlozolate ²	0.01	Dimoxystrobin ¹	0.01
Benfuracarb ¹	0.005	Clethodim ¹	0.01	Diniconazol ¹	0.01
Benthiavalicarb-isopropyl ¹	0.01	Climbazole ¹	0.01	Dinobuton ²	0.01
Benzoylprop-ethyl ^{1, 2}	0.01	Clodinafop-propargyl ¹	0.01	Dinocap ¹	0.01
Bifenthrin ²	0.01	Clofentezine ¹	0.01	Dinoseb ¹	0.01
Binapacryl ²	0.01	Clomazone ¹	0.01	Dinotefuran ¹	0.01
Biphenyl ²	0.01	Clopyralid ¹	0.01	Dioxathion (sum of isomers) ²	0.01
Bitertanol ¹	0.01	Cloquintocet-mexyl ¹	0.01	Diphenamid ¹	0.01
Boscalid ¹	0.01	Clothianidin ¹	0.01	Diphenylamin ¹	0.01
Bromacil ¹	0.01	Coumaphos ²	0.01	Dipropetryn ¹	0.01
Bromophos (-methyl) ²	0.01	Crimidine ¹	0.01	Disulfuton ¹	0.01
Bromophos-ethyl ²	0.01	Cyanazine ¹	0.01	Disulfuton sulfone ¹	0.01
Bromopropylate ²	0.01	Cyanofenphos ²	0.01	Disulfuton sulfoxide ¹	0.01
Bromopropylate (incl. 4,4'-Dibromobenzophenone) ²	0.01	Cyanophos ²	0.01	Ditalimfos ²	0.01
Bromoxynil ¹	0.01	Cyantrataniliprole ¹	0.01	Dithianon ¹	0.01
Bromoxynil-octanoate ²	0.01	Cyazofamid ¹	0.01	Diuron ¹	0.01
Bromuconazole ¹	0.01	Cycloxydim ¹	0.01	DNOC ¹	0.01
Bupirimate ¹	0.01	Cyflufenamid ¹	0.01	Dodine ¹	0.01
Buprofezin ¹	0.01	Cyfluthrin (sum of isomers) ²	0.01		
Butafenacil ¹	0.01	Cyhalofop-butyl ¹	0.01	E	
Butocarboxim ¹	0.01	Cyhalothrin, -lambda ²	0.01	Emamectin ¹	0.01
Butocarboxim sulfoxid ¹	0.01	Cymiazole ²	0.01	Endosulfan, -alpha ²	0.01
Butralin ¹	0.01	Cymoxanil ¹	0.01	Endosulfan, -beta ²	0.01
C	0.01	Cypermethrin (sum of isomers) ²	0.01	Endosulfan-sulfate ²	0.01
		Cyproconazole ¹	0.01	Endrin ²	0.01
Cadusafos ^{1, 2}	0.01	Cyprodinil ¹	0.01	Endrin aldehyde ²	0.01

Endrin ketone ²	0.01	Flurpirimidol ¹	0.01	Leptophos ²	0.01
EPN ²	0.01	Flusilazole ¹	0.01	Lindane (gamma-HCH, gamma-BCH) ²	0.01
Epoxiconazole ¹	0.01	Fluthiacet-methyl ¹	0.01	Linuron ¹	0.01
EPTC (Ethyl Dipropylthiocarbamate) ¹	0.01	Flutolanil ¹	0.01	Lufenuron ¹	0.01
Esbiothrin ²	0.01	Flutriafol ¹	0.01		
Etaconazole ¹	0.01	Fluvalinate, Tau- ²	0.01		
Ethalfuralin ²	0.01	Fluxapyroxad ¹	0.01	M	
Ethiofencarb ¹	0.01	FM-6-1 (Triflumizole metabolite) ¹	0.01	Malaoxon ¹	0.01
Ethiofencarb-sulfone ¹	0.01	Folpet ²	0.01	Malathion ^{1, 2}	0.01
Ethiofencarb-sulfoxide ¹	0.01	Fomesafen ¹	0.01	Mandipropamid ¹	0.01
Ethion ²	0.01	Fonofos ²	0.01	MCPA ¹	0.01
Ethiprole ¹	0.01	Forchlorfenuron ¹	0.01	MCPB ¹	0.01
Ethirimol ¹	0.01	Formetanate hydrochloride ¹	0.01	Mecarbam ^{1, 2}	0.01
Ethoprophos ^{1, 2}	0.01	Formothion ²	0.01	Mecoprop-P ¹	0.01
Ethoxyquin ¹	0.01	Fosthiazate ²	0.01	Mefenpyr-diethyl ¹	0.01
Etofenprox ²	0.01	Fuberidazole ¹	0.01	Mepanipyrim ¹	0.01
Etioazazole ¹	0.01	Furalaxyl ¹	0.01	Mepronil ¹	0.01
Etridiazole ²	0.01			Metaflumizone ¹	0.01
Etrifos ²	0.01	G		Metaxyl ¹	0.01
		Genite ²	0.01	Metamitron ¹	0.01
F				Metazachlor ¹	0.01
Famoxadone ¹	0.01	H		Metconazole ¹	0.01
Famphur ²	0.01	Halfenprox ²	0.01	Methabenzthiazuron ¹	0.01
Fenamidon ¹	0.01	Haloxypol ¹	0.01	Methacrisof ²	0.01
Fenamiphos ^{1, 2}	0.01	Haloxypol-etotyl (Haloxypol-2-ethoxyethyl) ¹	0.01	Methamidophos ^{1, 2}	0.01
Fenamiphos sulfone ^{1, 2}	0.01	Haloxypol-methyl ¹	0.01	Methidathion ²	0.01
Fenamiphos-sulfoxide ¹	0.01	Haloxypol-P-methyl ¹	0.01	Methiocarb ¹	0.01
Fenarimol ¹	0.01	HCH, alpha- (Hexachlorocyclohexane, alpha-BCH) ²	0.01	Methiocarb sulfone ¹	0.01
Fenazaquin ¹	0.01	HCH, beta- (Hexachlorocyclohexane, beta-BCH) ²	0.01	Methiocarb sulfoxide ¹	0.01
Fenbuconazole ¹	0.01	HCH, delta- (Hexachlorocyclohexane, delta-BCH) ²	0.01	Methomyl ¹	0.01
Fenchlorphos ²	0.01	Heptachlor ²	0.01	Methoxychlor ²	0.01
Fenhexamid ¹	0.01	Heptachlor epoxide, cis- ²	0.01	Methoxyfenozide ¹	0.01
Fenitrothion ²	0.01	Heptachlor epoxide, trans- ²	0.01	Metobromuron ¹	0.01
Fenoxaprop-P ¹	0.01	Heptenophos ²	0.01	Metolachlor ¹	0.01
Fenoxaprop-P-ethyl ¹	0.01	Hexachlorobenzene (HCB) ²	0.01	Metolcarb ¹	0.01
Fenoxycarb ¹	0.01	Hexaconazol ¹	0.01	Metrafenone ¹	0.01
Fenpiclonil ¹	0.01	Hexaflumuron ²	0.01	Metribuzin ¹	0.01
Fenprothrin ^{1, 2}	0.01	Hexazinone ¹	0.01	Mevinphos ²	0.01
Fenpropidin ¹	0.01	Hexythiazox ¹	0.01	Mirex ²	0.01
Fenpropimorph ¹	0.01			Molinate ¹	0.01
Fenpyrazamine ¹	0.01	I		Monocrotophos ²	0.01
Fenpyroximate ¹	0.01	Imazalil ¹	0.01	Monolinuron ¹	0.01
Fenson ²	0.01	Imibenconazole ¹	0.01	Myclobutanil ¹	0.01
Fensulfthion ²	0.01	Imidacloprid ¹	0.01		
Fenthion ^{1, 2}	0.01	Indoxacarb (sum of isomers) ¹	0.01	N	
Fenthion-oxon ¹	0.01	Iodofenphos ²	0.01	Napropamide ¹	0.01
Fenthion-oxon-sulfone ¹	0.01	Iodosulfuron-methyl ¹	0.01	Neburon ¹	0.01
Fenthion-sulfoxide ¹	0.01	Ioxynil ¹	0.01	Nicosulfuron ¹	0.01
Fenvalerate/Esfenvalerate (sum of isomers) ²	0.01	Iprobenfos ²	0.01	Nitenpyram ¹	0.01
Fipronil ^{1, 2}	0.005	Iprodione ²	0.01	Nitralin ²	0.01
Fipronil sulfide ²	0.005	Iprovalicarb ¹	0.01	Nitrapiyrin ²	0.01
Fipronil sulfone ²	0.005	Isazofos ²	0.01	Nitrofen ²	0.01
Flamprop-isopropyl ²	0.01	Isobenzan ²	0.01	Nonachlor, trans- ²	0.01
Flamprop-M-isopropyl ¹	0.01	Isocarbophos ²	0.01	Norflurazon ¹	0.01
Flazasulfuron ¹	0.01	Isodrin ²	0.01	Nuarimol ¹	0.01
Flonicamid ²	0.01	Isofenphos ^{1, 2}	0.01		
Florasulam ¹	0.01	Isofenphos-methyl ^{1, 2}	0.01	O	
Fluazifop-P ¹	0.01	Isoprocarb ¹	0.01	Ofurace ¹	0.01
Fluazifop-P-butyl ¹	0.01	Isopropalin ^{1, 2}	0.01	Omethoat ¹	0.01
Fluazinam ¹	0.01	Isoprothiolane ²	0.01	Oxadixyl ¹	0.01
Flubendiamide ¹	0.01	Isoproturon ¹	0.01	Oxamyl ¹	0.001
Flubenzimine ²	0.01	Isoxyrazam ¹	0.01	Oxyfluorfen ²	0.02
Fluchloralin ²	0.01	Isoxathion ²	0.01		
Flucythrinate (sum of isomers) ²	0.01			P	
Fludioxonil ¹	0.01	K		Paclobutrazol ¹	0.01
Flufenacet ¹	0.01	Karanjin ¹	0.01	Paraaxon (-ethyl) ²	0.01
Flufenoxuron ¹	0.01	Kresoxim-methyl ¹	0.01	Paraaxon-methyl ²	0.01
Flumetralin ²	0.01			Parathion (-ethyl) ²	0.01
Flupicolide ¹	0.01	L		Parathion-methyl ²	0.01
Fluopyram ¹	0.01	Lenacil ¹	0.01	Penconazole ¹	0.01
Fluotrimazole ¹	0.01			Pencycuron ¹	0.01
Fluoxastrobin ¹	0.01			Pendimethalin ²	0.01
Flupyrifadufurone ¹	0.01			Pendimethalin ²	0.01
Fluquinconazole ¹	0.01			Pentachloroaniline ²	0.01
				Pentachloroanisole ²	0.01

Pentachlorobenzene ²	0.01	Rotenone ¹	0.01	Tridemorph ¹	0.01
Penthiopyrad ¹	0.01			Trifloxystrobin ¹	0.01
Permethrin (sum of isomers) ²	0.01	S		Triflumizole ¹	0.01
Pethoxamid ¹	0.01	S 421 (Octachlorodipropyl ether) ²	0.01	Triflumuron ¹	0.01
Phenmedipham ¹	0.01	Sethoxydim ¹	0.01	Trifluralin ²	0.01
Phenothrin ¹	0.01	Simazine ¹	0.01	Triflusaluron-methyl ¹	0.01
Phenthoate ²	0.01	Spinosad ¹	0.01	Triforine ¹	0.01
Phenylphenol, 2- ²	0.01	Spirodiclofen ¹	0.01	Trimethacarb (Landrin) ¹	0.01
Phorate ²	0.01	Spiromesifen ^{1, 2}	0.01	Triticonazole ¹	0.01
Phorate sulfone ²	0.01	Spirotetramat ¹	0.01		
Phosalone ²	0.01	Spirotetramat-enol ¹	0.01	U	
Phosmet ²	0.01	Spirotetramat-enol-glucoside ¹	0.01	Uniconazole ¹	0.01
Phosphamidon ²	0.01	Spirotetramat-ketohydroxy ¹	0.01		
Phoxim ¹	0.01	Spirotetramat-monohydroxy ¹	0.01	V	
Picaridin ¹	0.01	Spiroxamine ¹	0.01	Vinclozolin ²	0.01
Picoxystrobin ¹	0.01	Sulcotrione ¹	0.01	Vinclozolin ²	0.01
Piperonyl butoxide ²	0.01	Sulfentrazone ¹	0.01		
Pirimicarb ¹	0.01	Sulfotep ²	0.01	Z	
Pirimicarb, Desmethyl- ¹	0.01	Sulfoxaflor ²	0.01	Zoxamide ¹	0.01
Pirimicarb, Desmethylformamido- ¹	0.01	Sulprofos ²	0.01		
Pirimiphos-ethyl ^{1, 2}	0.01				
Pirimiphos-methyl ²	0.01	T			
Plifenate ²	0.01	Tebuconazole ¹	0.01		
Prochloraz ¹	0.01	Tebufenozide ¹	0.01		
Procymidone ²	0.01	Tebufenpyrad ¹	0.01		
Profenofos ²	0.01	Tecnazene ²	0.01	Technical equipment	
Profluralin ²	0.01	Teflubenzuron ¹	0.01	¹ : LC-MS/MS	
Profoxydim ¹	0.01	Tefluthrin ²	0.01	² : GC-MS/MS	
Promecarb ¹	0.01	Tepraloxymid ¹	0.01		
Propamocarb ¹	0.01	Terbacil ¹	0.01	Method	
Propaquizafop ¹	0.01	Terbufos ²	0.01	ASU § 64 LFGB L 00.00-115 (DIN EN 15662),	
Propargite ¹	0.01	Terbufos sulfone ^{1, 2}	0.01	QuEChERS	
Propetamphos ²	0.01	Terbufos sulfoxide ¹	0.01		
Propham ¹	0.01	Terbumeton ¹	0.01		
Propiconazole ¹	0.01	Terbutylazine ¹	0.01	Additional residue analyses (not included	
Propoxur ¹	0.01	Terbutryn ¹	0.01	in pesticide multiresidue method)	
Propoxycarbazone ¹	0.01	Tetrachlorvinphos ²	0.01	Chlorate, Perchlorate by LC-MS/MS	
Propyzamide ¹	0.01	Tetraconazole ¹	0.01	Chlormequat, Mepiquat by LC-MS/MS	
Proquinazid ¹	0.01	Tetradifon ²	0.01	Diquat, Paraquat by LC-MS	
Prosulfocarb ¹	0.01	Tetramethrin ²	0.01	Dithiocarbamates by GC-MS/MS	
Prosulfuron ¹	0.01	Tetrasul ²	0.01	Ethephon by LC-MS/MS	
Prothioconazole (Prothioconazole-	0.01	TFNA (Flonicamid metabolite) ¹	0.01	Fentin by LC-MS/MS	
desthio (sum of isomers) ¹		TFNG (Flonicamid metabolite) ¹	0.01	Flumethrin by LC-MS/MS	
Prothiofos ²	0.01	Thiabendazole ¹	0.01	Fosetyl-Al, Phosphonic acid by LC-MS/MS	
Pymetrozine ¹	0.01	Thiacloprid ¹	0.01	Glyphosate (incl. AMPA), Glufosinate by	
Pyraclostrobin ¹	0.01	Thiamethoxam ¹	0.01	LC-MS/MS	
Pyrazophos ²	0.01	Thiodicarb ¹	0.01	Maleic hydrazide by LC-MS/MS	
Pyrethrins (Cinerin I+II, Jasmoline I+II,	0.01	Thiofanox ¹	0.01	Nicotine by LC-MS/MS	
Pyrethrin I+II) ¹		Thiofanox sulfone ¹	0.01	Organotin-Pesticides by LC-MS/MS	
Pyridaben ¹	0.01	Thiofanox sulfoxide ¹	0.01	Phenoxyalkanoic acids by LC-MS/MS	
Pyridaphenthion ^{1, 2}	0.01	Thionazin ²	0.01	Phosphane by GC-MS/MS	
Pyridate ¹	0.01	Thiophanat-methyl ¹	0.01	Polychlorinated Biphenyls (PCBs) by GC-MS/MS	
Pyrifenox ¹	0.01	Tolclofos-methyl ²	0.01	Quaternary ammonium compounds (QAVs) by	
Pyrimethanil ¹	0.01	Tolfenpyrad ¹	0.01	LC-MS/MS	
Pyriproxyfen ¹	0.01	Tolyfluanid ²	0.01	Beerepellents, wax moth control agents by	
		Tralkoxydim ¹	0.01	GC-MS/MS	
		Transfluthrin ²	0.01	Total Inorganic Bromide, Bromate by LC-MS/MS	
Q		Triadimefon ¹	0.01		
Quinalphos ²	0.01	Triadimenol ¹	0.01		
Quinclorac ¹	0.01	Triallate ²	0.01		
Quinmerac ¹	0.01	Triasulfuron ¹	0.01		
Quinoxifen ¹	0.01	Triazamate ^{1, 2}	0.01		
Quintozene ²	0.01	Triazophos ²	0.01		
Quizalofop (incl. Quizalofop-P) ¹	0.01	Tribenuron-methyl ¹	0.01		
		Trichlorfon ¹	0.01		
R		Trichloronat ²	0.01		
Resmethrin (sum of isomers) ¹	0.01	Tricyclazole ¹	0.01		
Resmethrin, d-trans-(Bioresmethrin) ¹	0.01				