

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
2,4-D		✓	
Abamectin (Avermectin B1A & B1B)		✓	
Acephat		✓	0.1
Acetamiprid		✓	
Acibenzolar-S-methyl	✓		
Aclonifen	✓		
Acrinathrin	✓	✓	
Alachlor	✓	✓	0.05
Aldicarb		✓	
Aldicarb-sulfoxid		✓	
Aldoxycarb (Aldicarb-sulfon)		✓	
Aldrin	✓		} 0.05
Dieldrin	✓		
Allethrin	✓		
Ametryn		✓	
Amidosulfuron		✓	
Aminocarb		✓	
Amitraz (inkl. Metabolite)		✓	
Atrazin		✓	
Azaconazol	✓		
Azadirachtin		✓	
Azinphos-ethyl		✓	0.1
Azinphos-methyl		✓	1
Azoxystrobin		✓	
Barban	✓		
Benalaxyl	✓		
Bendiocarb	✓		
Benfluralin (Benefin)	✓		
Benomyl		✓	
Benthiovalicarb-isopropyl		✓	
Bifenox	✓		
Bifenthrin	✓		
Binapacryl	✓		

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

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Biphenyl (Diphenyl)	✓		
Bitertanol		✓	
Boscalid (Nicobifen)		✓	
Bromacil		✓	
Bromocyclen	✓		
Bromophos-ethyl	✓		0.05
Bromophos-methyl	✓		0.05
Bromoxynil	✓		
Bromoxynil		✓	
Brompropylat	✓		3
Bromuconazol		✓	
Bupirimat	✓		
Buprofezin		✓	
Butafenacil	✓		
Butocarboxim-sulfoxid		✓	
Buturon		✓	
Cadusafos		✓	
Captafol (Difolatan)	✓		
Captan (Summe aus Folpet und captan)	✓		
Carbaryl (Sevin)		✓	
Carbendazim		✓	
Carbofuran (inkl. 1-Hydroxy-Carbofuran)		✓	
Carbophenothion	✓		
Carbophenothion-methyl			
Carbosulfan		✓	
Carboxin		✓	
Chinomethionat (Quinomethionat)	✓		
Chlodinafop-propargyl		✓	
Chlorantraniliprol (Rynaxypyr)		✓	
Chlorbenzilat	✓		
Chlorbromuron		✓	

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Chlorbufam		✓	
Chlordan-cis	✓		} 0.05
Chlordan-oxy	✓		
Chlordan-trans	✓		
Chlorfenapyr	✓		
Chlorfenson (Ovex)	✓		
Chlorfenvinphos (Clofenvinfos)	✓		0.5
Chlorfluazuron		✓	
Chloridazon (Pyrazon)		✓	
Chlormephos	✓		
Chloroneb	✓		
Chloroxuron		✓	
Chlorpropham (CIPC)	✓	✓	
Chlorpropylat	✓		
Chlorpyriphos (-ethyl)	✓		0.2
Chlorpyriphos-methyl	✓		0.1
Chlorsulfuron		✓	
Chlorthal-dimethyl (DCPA)	✓		0.01
Chlorthalonil	✓		
Chlorthion	✓		
Chlorthiophos	✓		
Chlortoluron		✓	
Chlozolinat		✓	
Cinerin I & II	✓		siehe Pyrethrum
Clethodim		✓	
Climbazol		✓	
Clofentezin		✓	
Clomazon		✓	
Clopyralid		✓	
Cloquintocet-mexyl		✓	
Clothianidin		✓	
Coumaphos	✓	✓	

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Crimidin	✓		
Cyanazin		✓	
Cyanofenphos	✓		
Cyanophos (Cyanox)	✓		
Cyazofamid		✓	
Cycloat		✓	
Cycloxydim		✓	
Cyflufenamid		✓	
Cyfluthrin (Summe)	✓		0.1
λ-Cyhalothrin	✓		1
Cyhexatin		✓	
Cymoxanil		✓	
Cypermethrin und Isomere (Summe)	✓		1
Cyproconazol		✓	
Cyprodinil		✓	
Cyromazin		✓	
DDD-o,p	✓		
DDD-p,p	✓		
DDE-o,p	✓		
DDE-p,p	✓		
DDT-o,p	✓		
DDT-p,p	✓		
DDT Summe (o,p-DDE, p,p-DDE, o,p-DDT, p,p-DDT, o,p-DDD und p,p-DDD)	✓		1
DEET (Dethyltoluamid)		✓	
Deltamethrin	✓		0.5
Demeton-S-methyl		✓	
Demeton-S-methyl sulfon		✓	
Desmedipham (DMP)		✓	
Desmetryn	✓		
Diafenthiuron		✓	
Diazinon		✓	0.5
Dichlobenil	✓		
Dichlorfenthion	✓		
Dichlofluanid	✓		0.1

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Dichlorvos (Dichlorfos / DDVP)		✓	1
Diclobutrazol	✓		
Dicloran	✓		
Dicofol-p,p	✓		0.5
Dicrotocos (Dicrotophos)		✓	
Diethofencarb		✓	
Difenoconazol		✓	
Diflubenzuron		✓	
Diflufenican		✓	
Dimethenamid		✓	
Dimethoat		✓	} 0.1
Omethoat		✓	
Dimethomorph	✓	✓	
Dimoxystrobin		✓	
Diniconazol	✓	✓	
Dinocap		✓	
Diphenamid	✓		
Diphenylamin	✓		
Dipropetryn	✓		
Disulfoton		✓	
Disulfoton Sulfon		✓	
Disulfoton Sulfoxid		✓	
Ditalimfos (Ditalimphos)		✓	
Dithianon		✓	
Diuron		✓	
Dodin		✓	
Emamectin		✓	
Endosulfan-alpha	✓		} 3
Endosulfan-beta	✓		
Endosulfansulfat	✓		
Endrin	✓		0.05
EPN	✓		
Epoxiconazol		✓	

Annex 1

Pesticidespectrum GC-MS & LC-MS/MS (DFG S19 and Alder)

Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
EPTC	✓		
Etaconazol	✓		
Ethiofencarb		✓	
Ethiofencarb-sulfon		✓	
Ethiofencarb sulfoxid		✓	
Ethion	✓		2
Ethirimol		✓	
Ethofumesat		✓	
Ethoprophos	✓		
Ethoxyquin	✓	✓	
Etofenprox	✓		
Etoxazol		✓	
Etridiazol	✓		
Etrimphos	✓		0.05
Famophos (Famphur)		✓	
Famoxadon	✓		
Famphur (Famophos)		✓	
Fenamidon	✓		
Fenamiphos	✓		
Fenarimol		✓	
Fenazaquin		✓	
Fenbuconazol	✓		
Fenbutatin-oxid		✓	
Fenchlorophos-oxon (Ronnel)		✓	
Fenchlorophos (Summe von Fenchlorophos und Fenchlorophos-oxon)	✓		0.1
Fenfluthrin	✓		
Fenhexamid		✓	
Fenithrothion (MEP)	✓		0.5
Fenobucarb		✓	
Fenoxycarb		✓	
Fenpiclonil	✓		
Fenpropathrin	✓		0.03
Fenpropidin		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Fenpropimorph		✓	
Fenpyroximat		✓	
Fenson (Fenizon)	✓		
Fensulfothion		✓	0.05
Fensulfothion-oxon		✓	
Fensulfothion-oxon-sulfon		✓	
Fensulfothion-sulfon		✓	
Fenthion	✓	✓	0.05
Fenthion-oxon		✓	
Fenthion-oxon-sulfon		✓	
Fenthion-oxon-sulfoxid		✓	
Fenthion-sulfon		✓	
Fenthion-sulfoxid		✓	
Fentinacetat		✓	
Fenvalerat/Esfenvalerat (SS-RR-Isomere)	✓		1.5
Fenvalerat/Esfenvalerat (RS-SR-Isomere)	✓		
Fipronil	✓	✓	
Flonicamid		✓	
Fluazifop		✓	
Fluazifop-P-butyl	✓		
Fluazinam		✓	
Fluazuron		✓	
Fluchloralin	✓		
Flucytrinat	✓		0.05
Fludioxonil		✓	
Flufenacet		✓	
Flufenoxuron		✓	
Flumioxazin	✓		
Flupicolid		✓	
Fluotrimazol	✓		
Fluquiconazol	✓		
Flurprimidol		✓	
Flusilazol	✓	✓	
Fluthiacet-methyl		✓	
Flutolanil		✓	
Flutriafol		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
τ -Fluvalinat	✓		0.05
Folpet (Summe aus Folpet und captan)	✓		
Fonophos (Fonofos)	✓		0.05
Forchlorfenuron		✓	
Formetanat		✓	
Formothion		✓	
Fosthiazat		✓	
Fuberidazol		✓	
Furalaxyl		✓	
Furathiocarb	✓		
Halfenprox (Brofenprox)	✓		
Haloxyfop		✓	
Haloxyfop-2-ethoxyethyl		✓	
Haloxyfop-methyl	✓		
Heptachlor (Summe von Heptachlor, <i>cis</i> -Heptachlorepoxyd und <i>trans</i> -Heptachlorepoxyd)	✓		0.05
Heptachlorepoxyd (<i>cis</i> & <i>trans</i>)	✓		
Heptenophos	✓		
Hexachlorbenzol (HCB)	✓		0.1
Hexachlorcyclohexan-alpha (alpha-HCH)	✓		
Hexachlorcyclohexan-beta (beta-HCH)	✓		
Hexachlorcyclohexan-delta (delta-HCH)	✓		
Hexachlorcyclohexan-gamma (gamma-HCH / Lindan)	✓		0.6
Hexachlorcyclohexan (Summe der α -, β -, δ - und ϵ -Isomeren)	✓		0.3
Hexaconazol	✓		
Hexaflumuron		✓	
Hexazon		✓	
Hexythiazox		✓	
Imazalil (Enilconazol)		✓	
Imazaquin		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Imazethapyr		✓	
Imibenconazol		✓	
Imidacloprid		✓	
Indoxacarb		✓	
Iodofenphos (Jodofenphos)	✓		
Ioxynil		✓	
Iprobenphos (IBP)	✓		
Iprodion	✓		
Iprovalicarb		✓	
Isazofos	✓		
Isocarbophos		✓	
Isodrin	✓		
Isofenphos-ethyl	✓	✓	
Isofenphos-methyl		✓	
Isoprocab (MIPC)		✓	
Isoproturon		✓	
Isoxaben		✓	
Isxadifen-ethyl		✓	
Isxaflutol		✓	
Isoxathion		✓	
Jasmolin I & II	✓		siehe Pyrethrum
Kresoxim-methyl	✓		
Kresoxim-methyl		✓	
Landrin (3,4,5-Trimethacarb)	✓		
Lenacil		✓	
Leptophos	✓		
Linuron		✓	
Lufenuron		✓	
Malaoxon		✓	1
Malathion (Mercaptothion)		✓	
Mecarbam		✓	0.05
Mefenpyr-diethyl		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Mepanipyrim		✓	
Mepronil		✓	
Metaflumizon		✓	
Metalaxyl	✓		
Metalaxyl		✓	
Metamitron	✓		
Metamitron		✓	
Metazachlor		✓	
Metconazol		✓	
Methabenzthiazuron		✓	
Methacriphos (Methacrifos)	✓		0.05
Methamidophos		✓	0.05
Methidathion		✓	0.2
Methiocarb (Mercaptodimethur)		✓	
Methiocarb-sulfon		✓	
Methiocarb-sulfoxid		✓	
Methomyl		✓	
Methoprotryn	✓		
Methoxychlor	✓		0.05
Methoxyfenozid		✓	
Methylpenthachlorphenylsulfide	✓		
Metobromuron		✓	
Metolachlor	✓		
Metolachlor		✓	
Metolcarb (MTMC)		✓	
Metosulam		✓	
Metoxuron		✓	
Metrafenon	✓		
Metribuzin		✓	
Mevinphos		✓	
Mirex	✓		0.01
Molinat		✓	
Monocrotophos		✓	0.1
Monolinuron		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Monuron (CMU)		✓	
Myclobutanil	✓	✓	
Napropamid		✓	
Neburon		✓	
Nitenpyram		✓	
Nitralin		✓	
Nitrapyrin	✓		
Nitrofen	✓		
Nitrothal-isopropyl	✓		
Norflurazon		✓	
Novaluron		✓	
Nuarimol		✓	
Ofurace		✓	
Oxadiazon		✓	
Oxadixyl	✓		
Oxadixyl		✓	
Oxamyl		✓	
Oxydemeton-methyl		✓	
Oxyfluorfen	✓		
Paclbutrazol	✓		
Parathion-ethyl (Thiophos)	✓		} 0.5
Paraoxon-ethyl		✓	
Parathion-methyl (Metaphos)	✓		} 0.2
Paraoxon-methyl		✓	
Pebulat	✓		
Penconazol		✓	
Pencycuron		✓	
Pendimethalin		✓	0.1
Pentachloranisol	✓		0.01
Pentachloroaniline	✓		
Pentachlorphenol (PCP)	✓		
Permethrin und Isomere (Summe)	✓		1
Perthan	✓		

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Phenkapton (CMP)	✓		
Phenmedipham		✓	
Phenothrin	✓		
Phentoat (PAP)		✓	
Phenylphenol, ortho-	✓		
Phorat	✓		
Phosalon		✓	0.1
Phosmet (PMP)		✓	0.05
Phosphamidon	✓		
Picolinafen		✓	
Picoxystrobin		✓	
Piperonylbutoxid	✓		3
Pirimicarb		✓	
Pirimicarb-desmethyl		✓	
Pirimicarb-desmethylformamido		✓	
Pirimiphos-ethyl		✓	0.05
Pirimiphos-methyl (Summe von Pirimiphos-methyl und <i>N</i> -Desethyl-pirimiphos-methyl)		✓	4
Primisulfuron methyl		✓	
Prochloraz		✓	
Procymidon	✓		0.1
Profenophos (Profenofos)		✓	0.1
Profluralin	✓		
Profoxydim		✓	
Promecarb		✓	
Prometryn	✓	✓	
Propachlor	✓		
Propamocarb		✓	
Propanil (DCPA)	✓		
Propaquizafop		✓	
Propargit		✓	
Propazin		✓	
Propetamphos		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Propham (IPC)	✓		
Propiconazol	✓		
Propoxycarbazone		✓	
Propoxur		✓	
Propyzamid		✓	
Proquinazid (KQ926)		✓	
Prosulfocarb	✓		
Prothioconazol		✓	
Prothiophos (Prothiofos)	✓		0.05
Pymetrozin		✓	
Pyraclostrobin		✓	
Pyraflufen-ethyl		✓	
Pyrazophos	✓		
Pyrethrin I & II	✓		siehe Pyrethrum
Pyrethrum (Pyrethrine) (Summe von Cinerin I, Cinerin II, Jasmolin I, Jasmolin II, Pyrethrin I und Pyrethrin II)	✓		3
Pyridaben	✓		
Pyridalil		✓	
Pyridaphenthion		✓	
Pyridat		✓	
Pyrifenox	✓		
Pyrimethanil		✓	
Pyriproxyfen		✓	
Quinalphos		✓	0.05
Quinmerac		✓	
Quinoxifen		✓	
Quintozen (PCNB) (Summe von Quintozen, Pentachloranilin und Methylpentachlorphenylsulfid)	✓		1
Quizalofop		✓	
Rotenon (Derris)		✓	
S-421	✓		0.02

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
Sethocydim		✓	
Silafluofen (Silaneophan)	✓		
Silthiofam		✓	
Simazin	✓		
Spinosad (Spinosyn A / Spinosyn D)		✓	
Spirodiclofen		✓	
Spiromesifen		✓	
Spiroxamin		✓	
Sulcotrione		✓	
Sulfentrazone	✓		
Sulfotep	✓		
Sulprofos	✓		
Tebuconazol		✓	
Tebufenozid		✓	
Tebufenpyrad		✓	
Tecnazen (TCNB)	✓		0.05
Teflubenzuron		✓	
Tefluthrin	✓		
Tepraloxidim		✓	
Terbacil	✓		
Terbufos	✓		
Terbumeton	✓		
Terbutylazin	✓		
Terbutryn	✓		
Tetrachlorvinphos (Stirophos)	✓		
Tetraconazol	✓		
Tetradifon (Tedion)	✓		0.3
Tetramethrin	✓		
Tetrasul	✓		
Thiabendazol		✓	
Thiacloprid		✓	
Thiametoxam		✓	
Thiobencarb		✓	

Annex 1

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Pesticide	GC-MS	LC-MS/MS	Specification [mg/kg]
(Benthiocarb)			
Thiofanox		✓	
Thiofanox-sulfon		✓	
Thiofanox-sulfoxid		✓	
Thiophanat-methyl		✓	
Tolclofos-methyl	✓		
Tolyfluanid	✓	✓	
Tralkoxydim		✓	
Transfluthrin	✓		
Triadimefon		✓	
Triadimenol		✓	
Triallat	✓		
Triazamat		✓	
Triazophos		✓	
Trichlorfon		✓	
Trichloronat	✓		
Triclopyr		✓	
Tricyclazol		✓	
Tridemorph		✓	
Trifloxystrobin	✓	✓	
Triflumizol		✓	
Triflumuron		✓	
Trifluralin	✓		
Triforin		✓	
Triticonazol	✓		
Uniconazol	✓		
Vamidothion	✓		
Vinclozolin	✓		0.4
Zoxami		✓	

The quantitation limits of pesticides are depending on the analyzed sample.
It could be between 0.005 mg/kg and 0.01 mg/kg.