

Technical Datasheet

Analysis Name: Method Number: Scope Application: Description: Sample Weight Required: Method Reference: Analytical Platform: Special Information:	Pesticides Analysis by GC-MS/MS LIBR 106 Description of a method for the analysis of pesticide residues in foods of plant origin, such as fruits (including dried fruits), vegetables (including dried vegetables), cereals and many processed products thereof by using GC-MS(/MS). The homogeneous sample is extracted with the help of acetonitrile. Samples with low water content (<80 %) require the addition of water before the initial extraction to get a total of approximately 10 g of water. After addition of magnesium sulfate, sodium chloride and buffering citrate salts, the mixture is shaken intensively and centrifuged for phase separation. An aliquot of the organic phase is cleaned-up by dispersive solid phase extraction (D-SPE) employing bulk sorbents as well as magnesium sulfate for the removal of residual water. Following clean-up with amino-sorbents (e.g. primary secondary amine sorbent, PSA) and if necessary graphitized carbon black (GCB) or octadecylsilane (ODS), extracts are acidified by adding a small amount of formic acid, to improve the storage stability of certain base sensitive pesticides. 100 g - GC-MS/MS Method not accredited.
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Analyte Reported	Alias	Unit of Measure	Typical Limit of Quantification	Uncertainty
Aldrin	-	mg/kg	0.010	< 50 %
Cyfluthrin (I+li+lil+lv)	-	mg/kg	0.010	< 50 %
Bromophos (Bromophos-Methyl)	-	mg/kg	0.010	< 50 %
Bromofós-Etil	-	mg/kg	0.010	< 50 %
Carbofenotion	-	mg/kg	0.010	< 50 %

Chlordane, Total	-	mg/kg	0.010	< 50 %
Clordan, Alfa-(Cis Clordano)	-	mg/kg	0.010	< 50 %
Clorotalonil	-	mg/kg	0.010	< 50 %
Clorpirifós-Metil	-	mg/kg	0.010	< 50 %
Coumafós	-	mg/kg	0.010	< 50 %
Cipermetrina (A+B+T+Z)	-	mg/kg	0.010	< 50 %
Ddd, O,P'-	-	mg/kg	0.010	< 50 %
Ddd, P,P'-	-	mg/kg	0.010	< 50 %
Dde, P,P'-	-	mg/kg	0.010	< 50 %
Ddt, O,P'-	-	mg/kg	0.010	< 50 %
Ddt, P,P'-	-	mg/kg	0.010	< 50 %
Deltametrina	-	mg/kg	0.010	< 50 %
Diazinon	-	mg/kg	0.010	< 50 %
Dichlofluanid	-	mg/kg	0.010	< 50 %
Diclorvós	-	mg/kg	0.010	< 50 %
Dicloran (Botram)	-	mg/kg	0.010	< 50 %
Dieldrin	-	mg/kg	0.010	< 50 %
Dimethoate	-	mg/kg	0.010	< 50 %
Disulfoton	-	mg/kg	0.010	< 50 %
Alfa-Endosulfano	-	mg/kg	0.010	< 50 %
Beta-Endosulfano	-	mg/kg	0.010	< 50 %
Sulfato De Endosulfano	-	mg/kg	0.010	< 50 %
Endrin	-	mg/kg	0.010	< 50 %
Ethion	-	mg/kg	0.010	< 50 %
Ethoprophos	-	mg/kg	0.010	< 50 %
Phenothrin	-	mg/kg	0.010	< 50 %
Fenitrotion	-	mg/kg	0.010	< 50 %
Fenthion	-	mg/kg	0.010	< 50 %
Fenvalerate I	-	mg/kg	0.010	< 50 %
Hch Total	-	mg/kg	0.010	< 50 %
Alfa-Hch	-	mg/kg	0.010	< 50 %
Beta-Hch	-	mg/kg	0.010	< 50 %
Delta-Hch	-	mg/kg	0.010	< 50 %
Gama-Hch (Lindano)	-	mg/kg	0.010	< 50 %
Heptaclor	-	mg/kg	0.010	< 50 %
Cis-Heptaclor Epóxido	-	mg/kg	0.010	< 50 %
Hexaclorobenzeno (Hcb)	-	mg/kg	0.010	< 50 %
Iprodione	-	mg/kg	0.010	< 50 %
Iodofenphos	-	mg/kg	0.010	< 50 %
Malation	-	mg/kg	0.010	< 50 %
Methacrifos	-	mg/kg	0.010	< 50 %
Methamidophos	-	mg/kg	0.010	< 50 %

Methoxychlor	-	mg/kg	0.010	< 50 %
Mevinphos Phosdrin	-	mg/kg	0.010	< 50 %
Mirex	-	mg/kg	0.010	< 50 %
Monocrotophos	-	mg/kg	0.010	< 50 %
Omethoate	-	mg/kg	0.010	< 50 %
PARATION (Parthion Ethyl)	-	mg/kg	0.010	< 50 %
Paration Metil	-	mg/kg	0.010	< 50 %
Permethrin (Cis+Trans)	-	mg/kg	0.010	< 50 %
Phosalone	-	mg/kg	0.010	< 50 %
Pirimifós-Metil	-	mg/kg	0.010	< 50 %
Procymidone	-	mg/kg	0.010	< 50 %
Pyrazophos	-	mg/kg	0.010	< 50 %
Tolyfluanid	-	mg/kg	0.010	< 50 %
Trichlorfon	-	mg/kg	0.010	< 50 %
Vinclozolin	-	mg/kg	0.010	< 50 %
Pcb 028	-	mg/kg	0.010	< 50 %
Pcb 052	-	mg/kg	0.010	< 50 %
Pcb 101	-	mg/kg	0.010	< 50 %
Pcb 118	-	mg/kg	0.010	< 50 %
Pcb 138	-	mg/kg	0.010	< 50 %
Pcb 153	-	mg/kg	0.010	< 50 %
Pcb 180	-	mg/kg	0.010	< 50 %
Pcb 128	-	mg/kg	0.010	< 50 %
Pcb 149 (H6cb-149)	-	mg/kg	0.010	< 50 %
Pcb 151 (H6cb-151)	-	mg/kg	0.010	< 50 %
Pcb 170	-	mg/kg	0.010	< 50 %
Pcb 018	-	mg/kg	0.010	< 50 %
Pcb 183 (H7cb-183)	-	mg/kg	0.010	< 50 %
Pcb 187 (H7cb-187)	-	mg/kg	0.010	< 50 %
Pcb 194	-	mg/kg	0.010	< 50 %
Pcb 044	-	mg/kg	0.010	< 50 %
Clorpirifós	-	mg/kg	0.010	< 50 %
Bioallethrin (Allethrin)	-	mg/kg	0.010	< 50 %
Lambda- Cyhalothrin	-	mg/kg	0.010	< 50 %
Fenpropathrin Danito	-	mg/kg	0.010	< 50 %
Bifenthrin	-	mg/kg	0.010	< 50 %
Acrinathrin	-	mg/kg	0.010	< 50 %
Ametryne	-	mg/kg	0.010	< 50 %
Antraquinona	-	mg/kg	0.010	< 50 %
Azinfós-Etil	-	mg/kg	0.010	< 50 %
Benfluralin	-	mg/kg	0.010	< 50 %
Bromopropylate	-	mg/kg	0.010	< 50 %

Bupirimate	-	mg/kg	0.010	< 50 %
Captan	-	mg/kg	0.010	< 50 %
Carbaril	-	mg/kg	0.010	< 50 %
Oxychlordane	-	mg/kg	0.010	< 50 %
Chlordane, Gamma- (Trans-Chlordane)	-	mg/kg	0.010	< 50 %
Chlorfenapyr	-	mg/kg	0.010	< 50 %
Chlorfenvinphos	-	mg/kg	0.010	< 50 %
Chlormephos	-	mg/kg	0.010	< 50 %
Chlorobenzilate	-	mg/kg	0.010	< 50 %
Chlorthiophos	-	mg/kg	0.010	< 50 %
Cyanophos	-	mg/kg	0.010	< 50 %
Cyhalothrin	-	mg/kg	0.010	< 50 %
Cyphenothrin (I+II+III)	-	mg/kg	0.010	< 50 %
Cyprodinil	-	mg/kg	0.010	< 50 %
Dde, O, P'-	-	mg/kg	0.010	< 50 %
Dichlobenil	-	mg/kg	0.010	< 50 %
4-4'- Diclorobenzofenona	-	mg/kg	0.010	< 50 %
Diclobutrazol	-	mg/kg	0.010	< 50 %
Diniconazole	-	mg/kg	0.010	< 50 %
Difenilamina	-	mg/kg	0.010	< 50 %
Fenvalerate II (Esfenvalerate)	-	mg/kg	0.010	< 50 %
Ethalfuralin	-	mg/kg	0.010	< 50 %
Perthane (Ethyl- Ddd)	-	mg/kg	0.010	< 50 %
Fenarimol	-	mg/kg	0.010	< 50 %
Fenpropathrin Danito	-	mg/kg	0.010	< 50 %
Fenson	-	mg/kg	0.010	< 50 %
Flubenzimine	-	mg/kg	0.010	< 50 %
Flucythrinate	-	mg/kg	0.010	< 50 %
Folpet	-	mg/kg	0.010	< 50 %
Fonofos	-	mg/kg	0.010	< 50 %
Trans-Heptaclor Epóxido	-	mg/kg	0.010	< 50 %
Hexaconazole	-	mg/kg	0.010	< 50 %
Isodrin	-	mg/kg	0.010	< 50 %
Isofenphos	-	mg/kg	0.010	< 50 %
Isopropalin	-	mg/kg	0.010	< 50 %
Kresoxim-Methyl	-	mg/kg	0.010	< 50 %
Malaoxon	-	mg/kg	0.010	< 50 %
Metalaxyl	-	mg/kg	0.010	< 50 %
Metolachlor	-	mg/kg	0.010	< 50 %
Metribuzin	-	mg/kg	0.010	< 50 %
Nitrofen	-	mg/kg	0.010	< 50 %

Nitrothal-Isopropyl	-	mg/kg	0.010	< 50 %
Nuarimol	-	mg/kg	0.010	< 50 %
Oxyfluorfen	-	mg/kg	0.010	< 50 %
Penconazole	-	mg/kg	0.010	< 50 %
Pendimethalin	-	mg/kg	0.010	< 50 %
Pentacloroanilina	-	mg/kg	0.010	< 50 %
Phenothrin	-	mg/kg	0.010	< 50 %
Phenylphenol, 2-	-	mg/kg	0.010	< 50 %
Phorate	-	mg/kg	0.010	< 50 %
Pirimicarb	-	mg/kg	0.010	< 50 %
Profenofos	-	mg/kg	0.010	< 50 %
Profluralin	-	mg/kg	0.010	< 50 %
Prometon	-	mg/kg	0.010	< 50 %
Prometryn	-	mg/kg	0.010	< 50 %
Prothiofos	-	mg/kg	0.010	< 50 %
Pyridaben	-	mg/kg	0.010	< 50 %
Pyrifeno	-	mg/kg	0.010	< 50 %
Pyriproxyfen	-	mg/kg	0.010	< 50 %
Quinoxifen	-	mg/kg	0.010	< 50 %
Quizalofop-P-Ethyl	-	mg/kg	0.010	< 50 %
Resmethrin	-	mg/kg	0.010	< 50 %
Tebufenpyrad	-	mg/kg	0.010	< 50 %
Tefluthrin	-	mg/kg	0.010	< 50 %
Terbuthylazine	-	mg/kg	0.010	< 50 %
Tetrachlorvinphos	-	mg/kg	0.010	< 50 %
Tetradifon	-	mg/kg	0.010	< 50 %
Tetramethrin	-	mg/kg	0.010	< 50 %
Tetrasul	-	mg/kg	0.010	< 50 %
Tolclofos-Methyl	-	mg/kg	0.010	< 50 %
Triadimefon	-	mg/kg	0.010	< 50 %
Trichloronate	-	mg/kg	0.010	< 50 %
Trifluralin	-	mg/kg	0.010	< 50 %
Zoxamide	-	mg/kg	0.010	< 50 %
Pesticides	-	mg/kg	0.010	< 50 %
Aldrin	-	mg/kg	0.010	< 50 %
Cyfluthrin (I+II+III+IV)	-	mg/kg	0.010	< 50 %
Bromophos (Bromophos- Methyl)	-	mg/kg	0.010	< 50 %
Bromofós-Etil	-	mg/kg	0.010	< 50 %
Carbofenotion	-	mg/kg	0.010	< 50 %
Chlordane, Total	-	mg/kg	0.010	< 50 %
Clordan, Alfa-(Cis Clordano)	-	mg/kg	0.010	< 50 %
Clorotalonil	-	mg/kg	0.010	< 50 %
Clorpirifós-Metil	-	mg/kg	0.010	< 50 %
Coumafós	-	mg/kg	0.010	< 50 %

Cipermetrina (A+B+T+Z)	-	mg/kg	0.010	< 50 %
Ddd, O,P'-	-	mg/kg	0.010	< 50 %
Ddd, P,P'-	-	mg/kg	0.010	< 50 %
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Diazinon	-	mg/kg	0.010	< 50 %
Dichlofluanid	-	mg/kg	0.010	< 50 %
Diclorvós	-	mg/kg	0.010	< 50 %
Dicloran (Botram)	-	mg/kg	0.010	< 50 %
Dieldrin	-	mg/kg	0.010	< 50 %
Dimethoate	-	mg/kg	0.010	< 50 %
Disulfoton	-	mg/kg	0.010	< 50 %
Alfa-Endosulfano	-	mg/kg	0.010	< 50 %
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Cis-Heptaclor Epóxido	-	mg/kg	0.010	< 50 %
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Methacrifos	-	mg/kg	0.010	< 50 %
Methamidophos	-	mg/kg	0.010	< 50 %
Methoxychlor	-	mg/kg	0.010	< 50 %
Mevinphos Phosdrin	-	mg/kg	0.010	< 50 %
Mirex	-	mg/kg	0.010	< 50 %
Monocrotophos	-	mg/kg	0.010	< 50 %
Omethoate	-	mg/kg	0.010	< 50 %

PARATION (Parthion Ethyl)	-	mg/kg	0.010	< 50 %
Paration Metil	-	mg/kg	0.010	< 50 %
Permethrin (Cis+Trans)	-	mg/kg	0.010	< 50 %
Phosalone	-	mg/kg	0.010	< 50 %
Pirimifós-Metil	-	mg/kg	0.010	< 50 %
Procymidone	-	mg/kg	0.010	< 50 %
Pyrazophos	-	mg/kg	0.010	< 50 %
Tolyfluanid	-	mg/kg	0.010	< 50 %
Trichlorfon	-	mg/kg	0.010	< 50 %
Vinclozolin	-	mg/kg	0.010	< 50 %
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Benfluralin	-	mg/kg	0.010	< 50 %
Bromopropylate	-	mg/kg	0.010	< 50 %
Bupirimate	-	mg/kg	0.010	< 50 %
Captan	-	mg/kg	0.010	< 50 %
Carbaril	-	mg/kg	0.010	< 50 %
Oxychlordane	-	mg/kg	0.010	< 50 %
Chlordane, Gamma- (Trans-Chlordane)	-	mg/kg	0.010	< 50 %

Chlorfenapyr	-	mg/kg	0.010	< 50 %
Chlorfenvinphos	-	mg/kg	0.010	< 50 %
Chlormephos	-	mg/kg	0.010	< 50 %
Chlorobenzilate	-	mg/kg	0.010	< 50 %
Chlorthiophos	-	mg/kg	0.010	< 50 %
Cyanophos	-	mg/kg	0.010	< 50 %
Cyhalothrin	-	mg/kg	0.010	< 50 %
Cyphenothrin (I+II+III)	-	mg/kg	0.010	< 50 %
Cyprodinil	-	mg/kg	0.010	< 50 %
Dde, O,P'-	-	mg/kg	0.010	< 50 %
Dichlobenil	-	mg/kg	0.010	< 50 %
4-4'- Diclorobenzofenona	-	mg/kg	0.010	< 50 %
Diclobutrazol	-	mg/kg	0.010	< 50 %
Diniconazole	-	mg/kg	0.010	< 50 %
Difenilamina	-	mg/kg	0.010	< 50 %
Fenvalerate II (Esfenvalerate)	-	mg/kg	0.010	< 50 %
Ethalfuralin	-	mg/kg	0.010	< 50 %
Perthane (Ethyl- Ddd)	-	mg/kg	0.010	< 50 %
Fenarimol	-	mg/kg	0.010	< 50 %
Fenpropathrin Danito	-	mg/kg	0.010	< 50 %
Fenson	-	mg/kg	0.010	< 50 %
Flubenzimine	-	mg/kg	0.010	< 50 %
Flucythrinate	-	mg/kg	0.010	< 50 %
Folpet	-	mg/kg	0.010	< 50 %
Fonofos	-	mg/kg	0.010	< 50 %
Trans-Heptaclor Epóxido	-	mg/kg	0.010	< 50 %
Hexaconazole	-	mg/kg	0.010	< 50 %
Isodrin	-	mg/kg	0.010	< 50 %
Isofenphos	-	mg/kg	0.010	< 50 %
Isopropalin	-	mg/kg	0.010	< 50 %
Kresoxim-Methyl	-	mg/kg	0.010	< 50 %
Malaoxon	-	mg/kg	0.010	< 50 %
Metalaxyl	-	mg/kg	0.010	< 50 %
Metolachlor	-	mg/kg	0.010	< 50 %
Metribuzin	-	mg/kg	0.010	< 50 %
Nitrofen	-	mg/kg	0.010	< 50 %
Nitrothal-Isopropyl	-	mg/kg	0.010	< 50 %
Nuarimol	-	mg/kg	0.010	< 50 %
Oxyfluorfen	-	mg/kg	0.010	< 50 %
Penconazole	-	mg/kg	0.010	< 50 %
Pendimethalin	-	mg/kg	0.010	< 50 %
Pentacloroanilina	-	mg/kg	0.010	< 50 %

Phenothrin	-	mg/kg	0.010	< 50 %
Phenylphenol, 2-	-	mg/kg	0.010	< 50 %
Phorate	-	mg/kg	0.010	< 50 %
Pirimicarb	-	mg/kg	0.010	< 50 %
Profenofos	-	mg/kg	0.010	< 50 %
Profluralin	-	mg/kg	0.010	< 50 %
Prometon	-	mg/kg	0.010	< 50 %
Prometryn	-	mg/kg	0.010	< 50 %
Prothiofos	-	mg/kg	0.010	< 50 %
Pyridaben	-	mg/kg	0.010	< 50 %
Pyrifenoxy	-	mg/kg	0.010	< 50 %
Pyriproxyfen	-	mg/kg	0.010	< 50 %
Quinoxifen	-	mg/kg	0.010	< 50 %
Quizalofop-P-Ethyl	-	mg/kg	0.010	< 50 %
Resmethrin	-	mg/kg	0.010	< 50 %
Tebufenpyrad	-	mg/kg	0.010	< 50 %
Tefluthrin	-	mg/kg	0.010	< 50 %
Terbuthylazine	-	mg/kg	0.010	< 50 %
Tetrachlorvinphos	-	mg/kg	0.010	< 50 %
Tetradifon	-	mg/kg	0.010	< 50 %
Tetramethrin	-	mg/kg	0.010	< 50 %
Tetrasul	-	mg/kg	0.010	< 50 %
Tolclofos-Methyl	-	mg/kg	0.010	< 50 %
Triadimefon	-	mg/kg	0.010	< 50 %
Trichloronate	-	mg/kg	0.010	< 50 %
Trifluralin	-	mg/kg	0.010	< 50 %
Zoxamide	-	mg/kg	0.010	< 50 %