

Handbook G

Page	CIPAC No.	Active	Formulations	Extraction	Filtration	Technique	Column	Column type	Mobile Phase	I.S.	Fit for purpose	Comments
5	362	Amitraz	TC/WP/EC	Ethyl Acetate	no	GC-FID	3% OV101	Packed column	Nitrogen	Squalane	?	GC packed column - obsolete
11	413	Bifenox	TC/SC	Methanol	yes	HPLC-UV - 280nm	Lichrospher C8	RP	MeOH/H ₂ O/CH ₃ CO ₂ H	Benzophenone	✓	Method also includes the impurities 2,4-Dichlorophenol and 2,4-Dichloroanisole
19	418	Clofentezine	TC/SC	Ortho Phosphoric acid in Acetone	no	HPLC-UV - 235nm	Spherisorb ODS2	RP	ACN/H ₂ O	Benzyl Butyl Phthalate	✓	
24	189	Coumatetralyl	TC/TP/AB/BB	ACN/MeOH/H ₂ O	no	HPLC-UV - 310nm	LiChrosorb	RP	ACN/H ₂ O/CH ₃ CO ₂ H	None	✓	
32	476	Dichlorprop, racemate	TC/SL/WP	ACN/H ₂ O/H ₂ SO ₄	no	HPLC-UV - 220nm	Nucleosil C18	RP	ACN/H ₂ O/H ₂ SO ₄	none	✓	
		Dichlorprop-P, enantiomer	TC/SL/WP	ACN/H ₂ O/H ₂ SO ₅	no	HPLC-UV - 229nm	Nucleosil Chiral 2	Chiral	n-Heptane/n-Pentanol/Trifluoroacetic acid	none	✓	After esterification with p-Toluenesulphonic acid
39	483	Dimethomorph	TC/WP/WG	ACN	no	HPLC-UV - 243nm	Hypersil ODS	RP	ACN/H ₂ O	none	✓	At 243nm the E and Z isomers have the same molar absorption
47	55 + 56	Diquat + Paraquat aq. Solutions	SL/SG	ACN/H ₂ O	yes	HPLC-UV - 290nm	Hypersil 5 ODS	RP	Octanesulphonic acid Sodium salt in H ₂ O and o-Phosphoric acid and diethylamine in ACN	1,1-Diethyl-4,4'-Bipyridyldiium di-iodide	✓	
50	153	Dithianon	TC/WP/SC	Dioxane	no	HPLC-UV - 254	Hypersil ODS	RP	ACN/H ₂ O	None	✓	Very long equilibration time for the HPLC minimum of 10 hours
56	471	Etofenprox	TC/EC/WP	Cyclohexane	no	GC-FID	5% Silicone an-600 on Chromosorb W-HP	Packed column	Nitrogen	Dicyclohexyl Phthalate	?	GC Packed column - obsolete
62	427	Fenpropimorph	TC/EC/SE	Propan-2-ol	no	GC-FID	DB-17	Capillary column	Helium	Eicosane	✓	Fenpropimorph is sensitive to O ₂ and is handled in an Argon atmosphere - how many labs have supply of Argon
68	334	Fenvalerate	EC	DCM	yes	GC-FID	2% Apiezon L on Chromosorb	Packed column	Nitrogen	Diphenyl Phthalate	?	GC packed column - obsolete
71	467	Fluazifop-P-Butyl	TC/EC/EW	Propan-2-ol / 2,2,4-Trimethylpentane	no	HPLC-UV - 254	Chira-chrom-1	Chiral	2,2,4-Trimethylpentane/Propan-2-ol/Trifluoroacetic acid	Benzil	✓	
			WG	Acetone	no	GC-FID	WCOT fused silica coated with dimethyl polysiloxane	Capillary column	He or H ₂	None	✓	
82	384	Fosetyl-Aluminium	TC/WP	Aqueous NaOH	no	Potentiometric titration	n/a	n/a	n/a	n/a	?	nonspecific iodometric determination, necessity of determination of free inorganic phosphites. The new CIPAC method is in CIPAC J p.66
89	437	Glufosinate, Ammonium	TC/SL	Potassium Dihydrogen Phosphate solution	no	HPLC-UV	Nucleosil SB	RP	Potassium Dihydrogen Phosphate / ACN	None	✓	
94	86	Ioxynil Ocanoate	TC/EC	Acetone	no	GC-FID	10% OV 101	Packed column	Nitrogen	Diphenyl Phthalate	?	GC packed column - obsolete
98	278	Iprodione	TC/WP/SC	Acetonitrile	yes	HPLC-UV	Nucleosil C18	RP	Sodium Acetate/Acetic acid in water / ACN	Propiophenone	✓	
105	488	Lindane	TC/SC/WP	Ethyl Acetate	no	GC-FID	DB 608	Capillary column	He	Hexachlorobenzene	✓	
109	475	Mecoprop racemate	TC/SL/WP	ACN / Aqueous H ₂ SO ₄	no	HPLC-UV	Nucleosil C18	RP	ACN/H ₂ O/CH ₃ CO ₂ H	None	✓	
		Mecoprop-P	TC/SL/WP	Methanol	no	HPLC-UV	Nucleosil Chiral 2	Chiral	n-Heptane/Pentan-1-ol	None	✓	After esterification with p-Toluenesulphonic acid
116	201	Metabenzthiazuron	TC/WP	THF/H ₂ O/n-Heptane	yes	HPLC-UV - 254	Silica Gel	NP	THF/H ₂ O/n-Heptane	None	✓	
122	397	Oxadixyl	TC/WP	Acetonitrile	no	HPLC-UV	LiChrosorb	RP	H ₂ O/ACN	Benzophenone	✓	Oxadixyl elutes at 4.8 mins and IS elutes at 20.6 - is this an acceptable IS
128	56	Paraquat	SL	ACN/H ₂ O	yes	HPLC-UV - 290nm	Hypersil 5 ODS	RP	Octanesulphonic acid Sodium salt in H ₂ O and o-Phosphoric acid and diethylamine in ACN	1,1-Diethyl-4,4'-Bipyridyldiium di-iodide	✓	
129	408	Propiconazole	TC/WP/SC/WG	MIBK	no	GC-FID	OV 1 on Supelcoport	Packed column	He	Di-(2-ethylhexyl)-Phthalate	?	GC packed column - obsolete suggestion for a new HPLC method
137	447	Pyridate	TC/WP/EC	DCM	NO	HPLC-UV - 245nm	Shandon MOS Hypersil	RP	MeOH/H ₂ O - pH = 4	None	✓	