

## Handbook K

Page	CIPAC No.	Active	Formulations	Extraction	Filtration	Technique	Column	Column type	Mobile Phase	I.S.	Fit for purpose	Comments
4	454	alpha-Cypermethrin	SC/WG	tetrahydrofuran	yes	GC-FID	dimethyl polysiloxane (DB-1)	capillary	Helium	dioctyl Phthalate	✓	
6	502	Bensulfuron-methyl	TC/WP/WG	acetonitrile	yes	HPLC-UV - 236 nm	Zorbax SB-C8	RP	ACN/H <sub>2</sub> O (pH 2.7)	None	✓	
13	288	Chlorothalonil	TC/WP/WG/SC	methanol/ toluene	yes	GC-FID	50% phenyl/ 50% dimethyl polysiloxane	capillary	Hydrogen	n-butyl phthalate	✓	
23	221	Chlopyrifos	UL	acetonitrile	no	HPLC-UV - 300 nm	Zorbax ODS	RP	ACN/H <sub>2</sub> O/acetic acid	1,4-dibromonaphthalene	✓	
24	391	Chlorsulfuron	WP	acetonitrile	yes	HPLC-UV - 254 nm	Zorbax SB-C18	RP	H <sub>2</sub> O (pH 3.0)/ACN	phenyl sulphone	✓	
25	510	Cycloxydim	TC/TK/EC	acidified acetonitrile	no	HPLC-UV - 280 nm	Inertsil Phenyl	RP	MeOH/Ammonium acetate buffer (10 mmol) (pH 6)	None	✓	
32	85	Dicamba	TC/SL	methanol	no	HPLC-UV - 280 nm	Nucleosil C18	RP	MeOH/phosphoric acid 0.1 % (Gradient)	None	✓	
			WG	methanol/glacial acetic acid	(yes)	HPLC-UV - 280 nm	Nucleosil C18	RP	MeOH/phosphoric acid 0.1 % (Gradient)	None	✓	
38	609	Epoxiconazole	TC/SC/SE/EC	tetrahydrofuran	no	GC-FID	100%dimethyl polysiloxane (DB-1)	capillary	Helium	Tetraphenylethene	✓	
47	481	Esfenvalerate	TC/UL	acetone	no	GC-FID	dimethyl polysiloxane (DB-1)	capillary	Helium	di-n-octyl phthalate	✓	
			TC/UL	hexane/2-propanol	no	HPLC-UV - 278 nm	Sumochiral OA-2000	packed	hexane/2-propanol	None		Hänel setzt sich mit Sumitomo in Verbindung
57	471	Etofenprox	TC/EC/EW	methanol	no	GC-FID	50% trifluoropropyl/ 50% dimethyl polysiloxane (DB-210)	capillary	Helium	dicyclohexyl phthalate	✓	
			WP	acetone	yes	GC-FID	50% trifluoropropyl/ 50% dimethyl polysiloxane (DB-210)	capillary	Helium	dicyclohexyl phthalate	✓	
64	740	Icaridin	TC/SL	propan-2-ol	no	GC-FID	95% dimethyl polysiloxane/ 5% diphenyl polysiloxane (e.g. DB5)	capillary	Helium	dimethyl phthalate	✓	
70	582	Imidacloprid	TC/WS/FS	acetonitrile	no	HPLC-UV - 260 nm	Lichrospher RP 18	RP	water/buffer solution/ acetonitrile	None	✓	
			WG/SC	acetonitrile	(yes)	HPLC-UV - 260 nm	Lichrospher RP 18	RP	water/buffer solution/ acetonitrile	None	✓	
77	568	Kresoxim-methyl	TC/WG/SC/SE	acetonitrile/water	no	HPLC-UV - 223 nm	RP18 modified silicagel (e.g. Nucleosil C18)	RP	ACN/H <sub>2</sub> O/sulfuric acid	None	✓	
86	463	lambda-Cyhalothrin	CS	acetone	no	GC-FID	dimethyl polysiloxane	capillary	Helium or hydrogen	dicyclohexyl phthalate	✓	
88	12	Malathion	TC/EC/EW/DP	tetrahydrofuran	no	GC-FID	100% dimethylpolysiloxane	capillary	Helium	docosane	✓	
95	441	Metsulfuron-methyl	WP	acetonitrile/ammonia solution	yes	HPLC-UV - 254 nm	Zorbax SB-C8	RP	H <sub>2</sub> O (pH3.0)/ACN	phenyl sulphone	✓	
96	599	Nicosamid	SC	methanol	no	HPLC-UV - 236 nm	Waters Symmetry C8, Inertsil RP8, Nucleosil 100 C18	RP	MeOH/H <sub>2</sub> O/phosphoric acid	None	✓	
97	171	Oxydemeton-methyl	TC/TK/EC/SL	acetonitrile/water	no	HPLC-UV - 220 nm	Lichrospher RP 18	RP	H <sub>2</sub> O/ACN	None	✓	
105	383	Procymidone	TC	acetone	no	GC-FID	100% dimethyl polysiloxane (DB-1)	capillary	Helium	dibutyl sebacate	✓	
			WP/WG/SC	acetone	yes	GC-FID	100% dimethyl polysiloxane (DB-1)	capillary	Helium	dibutyl sebacate	✓	
114	452	Thifensulfuron-methyl	TC/WG	acetonitrile	yes	HPLC-UV - 280 nm	Zorbax SB-C18	RP	ACN/H <sub>2</sub> O (pH 2.5)	None	✓	
121	741	Transfluthrin	TC/SL	toluene	no	GC-FID	dimethyl polysiloxane (e.g. DB 1)	capillary	Helium	dipentyl phthalate	✓	
128	546	Tribenuron methyl	TC/WG	acetonitrile	yes	HPLC-UV - 254 nm	Whatman Partisil ODS-3 RAC II	RP	H <sub>2</sub> O (pH 2.2)/ACN	3-methyl-1,1-diphenylurea	✓	
			WG	acetonitrile/ammonium hydroxide	yes	HPLC-UV - 254 nm	Whatman Partisil ODS-3 RAC II	RP	H <sub>2</sub> O (pH 2.2)/ACN	3-methyl-1,1-diphenylurea	✓	

## Miscellaneous Techniques

Page	Comments
137	MT 36.3 Emulsion characteristics and re-emulsification properties
140	MT 178.2 Attrition resistance of dispersible granules
142	MT 184 Suspensibility of formulations forming suspensions on dilution with water
149	MT 185 Wet sieve test
151	MT 186 Bulk density
153	MT 187 Particle size analysis by laser diffraction