

National Referral Laboratory

ICAR-National Research Centre for Grapes, Manjari farm, Pune 412307

TARGET LIST OF ANALYTES (PT ID: NRL / PT-FV /2024/Grape-3)

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
1	1-Naphthylacetamide and 1-naphthylacetic acid (sum of 1naphthylacetamide and 1-naphthylacetic acid and its salts, expressed as 1-naphytlacetic acid)	0.02-0.250
2	2,4-D (sum of 2,4-D and its esters and its conjugates, expressed as 2,4-D)	0.02-0.250
3	4-Bromo-2-chlorophenol (metabolite of Profenophos)	0.02-0.250
4	4-Chloro-3-methylphenol	0.02-0.250
5	4-CPA (4-Chlorophenoxy acetic acid)	0.02-0.250
6	6-Benzyl adenine	0.02-0.250
7	Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a, expressed as avermectin B1a) (F),(R)	0.02-0.250
8	Acephate	0.02-0.250
9	Acetamiprid (R)	0.02-0.250
10	Afidopyropen	0.02-0.250
11	Alachlor	0.02-0.250
12	Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin) (F)	0.02-0.250
13	Allethrin and Bioallethrin	0.02-0.250
14	Ametoctradin (R) (F)	0.02-0.250
15	Ametryn	0.02-0.250
16	Amisulbrom	0.02-0.250
17	Anilofos	0.02-0.250
18	Atrazine (F)	0.02-0.250
19	Azadirachtin	0.02-0.250
20	Azimsulfuron	0.02-0.250
21	Azoxystrobin	0.02-0.250
22	Benalaxyl including other mixtures of constituent isomers including Benalaxyl-M (sum of isomers)	0.02-0.250
23	Bendiocarb	0.02-0.250
24	Benomyl	0.02-0.250
25	Bensulfuron-methyl	0.02-0.250
26	Bifenazate (sum of bifenazate plus bifenazate-diazene expressed as bifenazate) (F)	0.02-0.250
27	Bifenthrin (sum of isomers) (F)	0.02-0.250
28	Bispyribac (sum of bispyribac, its salts and its esters, expressed as bispyribac)	0.02-0.250
29	Bitertanol (sum of isomers) (F)	0.02-0.250
30	Boscalid (R) (F)	0.02-0.250
31	Broflanilide	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
32	Bupirimate (A),(F),(R)	0.02-0.250
33	Buprofezin (F)	0.02-0.250
34	Butachlor	0.02-0.250
35	Captafol	0.02-0.250
36	Captan (Sum of captan and tetrahydropthalimide (THPI), expressed as captan) (R) (A)	0.02-0.250
37	Carbaryl (F)	0.02-0.250
38	Carbendazim	0.02-0.250
39	Carbofuran (sum of carbofuran (including any carbofuran generated from carbosulfan, benfuracarb or furathiocarb) and 3-OH carbofuran expressed as carbofuran) (R)	0.02-0.250
40	Carboxin (carboxin plus its metabolites carboxin sulfoxide and oxycarboxin (carboxin sulfone), expressed as carboxin)	0.02-0.250
41	Carfentrazone-ethyl (sum of carfentrazone-ethyl and carfentrazone, expressed as carfentrazone-ethyl) (R)	0.02-0.250
42	Carpropamid	0.02-0.250
43	Cartap hydrochloride	0.02-0.250
44	Chlorantraniliprole	0.02-0.250
45	Chlordane (sum of cis- and trans-chlordane) (F),(R)	0.02-0.250
46	Chlorfenapyr	0.02-0.250
47	Chlorfenvinphos	0.02-0.250
48	Chlorfluazuron	0.02-0.250
49	Chlorimuron-ethyl	0.02-0.250
50	Chlormequat (CCC) (sum of chlormequat and its salts, expressed as chlormequat-chloride)	0.02-0.250
51	Chlorothalonil (R)	0.02-0.250
52	Chlorpropham (R) , (F)	0.02-0.250
53	Chlorpyrifos (F)	0.02-0.250
54	Chlorpyrifos-methyl (R),(F)	0.02-0.250
55	Chromafenozide	0.02-0.250
56	Cinemethylene	0.02-0.250
57	Clethodim (sum of Sethoxydim and Clethodim including degradation products calculated as Sethoxydim)	0.02-0.250
58	Clofentezine (R)	0.02-0.250
59	Clomazone	0.02-0.250
60	Clothianidin	0.02-0.250
61	Coumachlor	0.02-0.250
62	Coumatetralyl	0.02-0.250
63	Cyantraniliprole	0.02-0.250
64	Cyazofamid	0.02-0.250
65	Cyenopyrofen	0.02-0.250
66	Cyflufenamid (sum of cyflufenamid (Z-isomer) and its E-isomer, expressed as cyflufenamid) (A) (R)	0.02-0.250
67	Cyflumetofen	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
68	Cyfluthrin (including other mixtures of constituent isomers sum of isomers)	0.02-0.250
69	Cyhalofop-butyl	0.02-0.250
70	Cymoxanil	0.02-0.250
71	Cypermethrin (cypermethrin including other mixtures of constituent isomers (sum of isomers)) (F)	0.02-0.250
72	Cyproconazole (F)	0.02-0.250
73	Cyprodinil (R) (F)	0.02-0.250
74	Dazomet (Methylisothiocyanate resulting from the use of Dazomet and metam)	0.02-0.250
75	p,p'-DDT	0.02-0.250
76	o,p'-DDT	0.02-0.250
77	p,p'-DDE	0.02-0.250
78	p,p'TDE (DDD)	0.02-0.250
79	Deltamethrin (cis-deltamethrin) (F)	0.02-0.250
80	Diafenthifuron	0.02-0.250
81	Diazinon (F)	0.02-0.250
82	Dichlorvos	0.02-0.250
83	Diclofop (sum diclofop-methyl and diclofop acid expressed as diclofop-methyl)	0.02-0.250
84	Diclosulam	0.02-0.250
85	Dicofol (sum of p,p' and o,p' isomers)	0.02-0.250
86	Dieldrin	0.02-0.250
87	Difenoconazole	0.02-0.250
88	Diflubenzuron (F),(R)	0.02-0.250
89	Dimethoate	0.02-0.250
90	Dimethomorph (sum of isomers)	0.02-0.250
91	Dinotefuran	0.02-0.250
92	Dithianon	0.02-0.250
93	Diuron	0.02-0.250
94	Dodine	0.02-0.250
95	Edifenphos	0.02-0.250
96	Emamectin benzoate B1a, expressed as emamectin	0.02-0.250
97	alpha-Endosulphan	0.02-0.250
98	beta-Endosulphan	0.02-0.250
99	Endosulphan sulphate	0.02-0.250
100	Endrin	0.02-0.250
101	Epoxiconazole (F)	0.02-0.250
102	Ethephon	0.02-0.250
103	Ethion	0.02-0.250
104	Ethiprole	0.02-0.250
105	Ethofenprox (Etofenprox)	0.02-0.250
106	Ethoxysulfuron	0.02-0.250
107	Etoxazole	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
108	Etrimfos	0.02-0.250
109	Famoxadone (F)	0.02-0.250
110	Fenamidone	0.02-0.250
111	Fenarimol	0.02-0.250
112	Fenazaquin	0.02-0.250
113	Fenhexamid (F)	0.02-0.250
114	Fenitrothion	0.02-0.250
115	Fenobucarb	0.02-0.250
116	Fenoxyaprop-p	0.02-0.250
117	Fenpropothrin	0.02-0.250
118	Fenpyroximate (A) (F) (R)	0.02-0.250
119	Fenthion (fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)	0.02-0.250
120	Fenvalerate (any ratio of constituent isomers (RR, SS, RS & SR) including esfenvalerate) (F) (R)	0.02-0.250
121	Fipronil	0.02-0.250
122	Fipronil sulfone	0.02-0.250
123	Flonicamid	0.02-0.250
124	TNFG	0.02-0.250
125	TNFA	0.02-0.250
126	Fluazifop-P (sum of all the constituent isomers of fluazifop, its esters and its conjugates, expressed as fluazifop)	0.02-0.250
127	Flubendiamide	0.02-0.250
128	Flucetosulfuron	0.02-0.250
129	Fluchlralin	0.02-0.250
130	Fluensulfone	0.02-0.250
131	Flufenacet (sum of all compounds containing the N fluorophenylN-isopropyl moiety expressed as flufenacet equivalent)	0.02-0.250
132	Flufenoxuron	0.02-0.250
133	Flufenzin	0.02-0.250
134	Flumioxazine	0.02-0.250
135	Fluopicolide	0.02-0.250
136	Flupyram	0.02-0.250
137	Flupyradifurone	0.02-0.250
138	Flusilazole	0.02-0.250
139	Fluthiacet-methyl	0.02-0.250
140	Fluxapyroxad	0.02-0.250
141	Fomesafen	0.02-0.250
142	Forchlorfenuron (CPPU)	0.02-0.250
143	Fosetyl-Al	0.02-0.250
144	Phosphorous acid	0.02-0.250
145	Halosulfuron methyl	0.02-0.250
146	Haloxyfop (Sum of haloxyfop, its esters, salts and conjugates expressed as haloxyfop (sum of 0.01the R- and S- isomers at any	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
	ratio)) (F) (R)	
147	Heptachlor	0.02-0.250
148	Heptachlor epoxide	0.02-0.250
149	Hexachlorocyclohexane (HCH), alpha-isomer (F)	0.02-0.250
150	Hexachlorocyclohexane (HCH), beta-isomer (F)	0.02-0.250
151	Hexaconazole	0.02-0.250
152	Hexazinone	0.02-0.250
153	Hexythiazox	0.02-0.250
154	Homobrassinolide	0.02-0.250
155	Imazamox (Sum of imazamox and its salts, expressed as imazamox)	0.02-0.250
156	Imazethapyr	0.02-0.250
157	Imidacloprid	0.02-0.250
158	Indaziflam	0.02-0.250
159	Indoxacarb (sum of indoxacarb and its R enantiomer) (F)	0.02-0.250
160	Iodosulfuron-methyl (sum of iodosulfuron-methyl and its salts, expressed as iodosulfuron-methyl)	0.02-0.250
161	Iprobenphos	0.02-0.250
162	Iprodione	0.02-0.250
163	Iprovalicarb	0.02-0.250
164	Isoprothiolane	0.02-0.250
165	Isoproturon	0.02-0.250
166	Ivermectin	0.02-0.250
167	Karanjin	0.02-0.250
168	Kasugamycin	0.02-0.250
169	Kresoxim methyl	0.02-0.250
170	Lambda-cyhalothrin (includes gamma-cyhalothrin) (sum of R,S and S,R isomers) (F)	0.02-0.250
171	Lindane (Gamma-isomer of hexachlorocyclohexane (HCH)) (F)	0.02-0.250
172	Linuron	0.02-0.250
173	Lufenuron (any ratio of constituent isomers) (F)	0.02-0.250
174	Malathion (sum of malathion and malaoxon expressed as malathion)	0.02-0.250
175	Mandipropamid (any ratio of constituent isomers)	0.02-0.250
176	Matrine	0.02-0.250
177	Oxymatrine	0.02-0.250
178	Mepiquat (sum of mepiquat and its salts, expressed as mepiquat chloride)	0.02-0.250
179	Meptyldinocap (sum of 2,4-DNOPC and 2,4-DNOP expressed as meptyldinocap)	0.02-0.250
180	Metaflumizone (sum of E- and Z- isomers)	0.02-0.250
181	Metalaxyl and Metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))	0.02-0.250
182	Metamifop	0.02-0.250
183	Metamitron	0.02-0.250
184	Methabenzthiazuron	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
185	Methamidophos	0.02-0.250
186	Methomyl	0.02-0.250
187	Methoxyfenazide	0.02-0.250
188	Metolachlor and S-Metolachlor (metolachlor including other mixtures of constituent isomers including S-metolachlor (sum of isomers))	0.02-0.250
189	Metrafenone (F)	0.02-0.250
190	Metribuzin	0.02-0.250
191	Milbemectin (sum of milbemycin A4 and milbemycin A3, expressed as milbemectin)	0.02-0.250
192	Monocrotophos	0.02-0.250
193	Myclobutanil (sum of constituent isomers) (R)	0.02-0.250
194	Nereistoxin	0.02-0.250
195	Nitenpyram	0.02-0.250
196	Novaluron (F)	0.02-0.250
197	Omethoate	0.02-0.250
198	Orthosulfamuron	0.02-0.250
199	Oxadiargyl	0.02-0.250
200	Oxadiazon	0.02-0.250
201	Oxathiapiprolin	0.02-0.250
202	Oxycarboxin	0.02-0.250
203	Oxydemeton- methyl (sum of oxydemeton methyl and demeton-Smethylsulfone expressed as oxydemeton-methyl)	0.02-0.250
204	Oxyfluorfen	0.02-0.250
205	Paclobutrazol (sum of constituent isomers)	0.02-0.250
206	Parathion - methyl (sum of Parathion-methyl and paraoxon- methyl expressed as Parathion -methyl)	0.02-0.250
207	Parathion ethyl	0.02-0.250
208	Penconazole (F)	0.02-0.250
209	Pencycuron (sum of pencycuron and pencycuron-PB-amine, expressed as pencycuron) (R) (F) (A)	0.02-0.250
210	Pendimethalin	0.02-0.250
211	Penoxsulam	0.02-0.250
212	Permethrin (sum of isomers)	0.02-0.250
213	Phenthroate	0.02-0.250
214	Phorate (sum of phorate, its oxygen analogue and their sulfones expressed as phorate)	0.02-0.250
215	Phorate sulfoxide	0.02-0.250
216	Phorate sulfone	0.02-0.250
217	Phosalone	0.02-0.250
218	Phosmet	0.02-0.250
219	Phosphamidon	0.02-0.250
220	Picoxystrobin	0.02-0.250
221	Pinoxaden(Sum of M4 and M6 (both free and conjugated),	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
	expressed as pinoxaden (R),(A))	
222	Pirimiphos-methyl	0.02-0.250
223	Polyoxin D zinc salt	0.02-0.250
224	Pretilachlor	0.02-0.250
225	Profenophos	0.02-0.250
226	Propamocarb (sum of propamocarb and its salt expressed as propamocarb)	0.02-0.250
227	Propanil	0.02-0.250
228	Propargite	0.02-0.250
229	Propetamphos	0.02-0.250
230	Propiconazole (sum of isomers) (F)	0.02-0.250
231	Propineb (expressed as propilendiamine)	0.02-0.250
232	Propoxur	0.02-0.250
233	Pymetrozine	0.02-0.250
234	Pyraclostrobin	0.02-0.250
235	Pyrazosulfuron-ethyl	0.02-0.250
236	Pyridaben	0.02-0.250
237	Pyridalyl	0.02-0.250
238	Pyriproxyfen	0.02-0.250
239	Pyrithiobac-sodium	0.02-0.250
240	Pyroxasulfone	0.02-0.250
241	Quinalphos	0.02-0.250
242	Simazine	0.02-0.250
243	Spinetoram (sum of spinetoram-J and spinetoram-L) (A),(F)	0.02-0.250
244	Spinosad (sum of Spinosyn A+D)	0.02-0.250
245	Spirodiclofen	0.02-0.250
246	Spiromesifen	0.02-0.250
247	Spirotetramat	0.02-0.250
248	Spirotetramat-enol	0.02-0.250
249	Sulfentrazone	0.02-0.250
250	Sulfosulfuron	0.02-0.250
251	Sulfoxaflor (sum of isomers)	0.02-0.250
252	tau-Fluvalinate	0.02-0.250
253	Tebuconazole	0.02-0.250
254	Tembotrione (Sum of parent tembotrione (AE 0172747) and its metabolite M5 (4,6-dihydroxy tembotrione), expressed as tembotrione) (R)	0.02-0.250
255	Temephos	0.02-0.250
256	Tetraconazole	0.02-0.250
257	Thiabendazole	0.02-0.250
258	Thiacloprid	0.02-0.250
259	Thiamethoxam	0.02-0.250
260	Thifluzamide	0.02-0.250

Sr. No.	Name of Chemicals/Pesticides	PT Range (mg kg ⁻¹)
261	Thiobencarb (4-chlorobenzyl methyl sulfone) (A)	0.02-0.250
262	Thiocyclam	0.02-0.250
263	Thiodicarb	0.02-0.250
264	Thiometon	0.02-0.250
265	Thiophanate-methyl	0.02-0.250
266	Tolfenpyrad	0.02-0.250
267	Topramezone	0.02-0.250
268	Transfluthrin	0.02-0.250
269	Triadimefon	0.02-0.250
270	Triadimenol (any ratio of constituent isomers)	0.02-0.250
271	Triafamone	0.02-0.250
272	Tri-allate	0.02-0.250
273	Triasulfuron	0.02-0.250
274	Triazophos	0.02-0.250
275	Trichlorfon	0.02-0.250
276	Tricyclazole	0.02-0.250
277	Tridemorph	0.02-0.250