

List of agrochemicals to be monitored for the grape season 2020-2021

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
1.	1-Naphthylacetamide and 1-naphthylacetic acid (sum of 1-naphthylacetamide and 1-naphthylacetic acid and its salts, expressed as 1-naphthylacetic acid)	0.06*
2.	2,4-D (sum of 2,4-D and its esters and its conjugates, expressed as 2,4-D)	0.10
3.	4-Bromo-2-chlorophenol (metabolite of Profenophos)	0.01*
4.	4-Chloro-3-methylphenol	0.01*
5.	4-CPA (4-Chlorophenoxy acetic acid)	0.01*
6.	6-Benzyl adenine	0.01*
7.	Abamectin (sum of avermectin B1a, avermectin B1b and delta-8,9 isomer of avermectin B1a)	0.01*
8.	Acephate	0.01*
9.	Acetamiprid (R)	0.50
10.	Afidopyropen	0.01*
11.	Alachlor	0.01*
12.	Aldrin (Aldrin and dieldrin combined expressed as dieldrin)	0.01*
13.	Allethrin and Bioallethrin	0.01*
14.	Ametoctradin	6.00
15.	Ametryn	0.01*
16.	Amisulbrom	0.50
17.	Anilofos	0.01*
18.	Atrazine	0.05*
19.	Aureofungin	0.01*
20.	Azadirachtin	1.00
21.	Azimsulfuron	0.01*
22.	Azoxystrobin	3.00
23.	Benalaxyl including other mixtures of constituent isomers including Benalaxyl-M (sum of isomers)	0.30
24.	Bendiocarb	0.01*
25.	Benomyl (see carbendazim)	0.30
26.	Bensulfuron-methyl	0.01*
27.	Bentazone (Sum of bentazone, its salts and 6-hydroxy (free and conjugated) and 8-hydroxy bentazone (free and conjugated), expressed as bentazone) (R)	0.03*
28.	Bifenazate (sum of bifenazate plus bifenazate-diazene expressed as	0.70

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
	bifenazate) (F)	
29.	Bifenthrin (sum of isomers) (F)	0.30
30.	Bispyribac	0.01*
31.	Bitertanol (sum of isomers) (F)	0.01*
32.	Boscalid (F) (R) (A)	5.00
33.	Bromadiolone	0.01*
34.	Bupirimate	1.50
35.	Buprofezin (F)	0.01*
36.	Butachlor	0.01*
37.	Captafol	0.02*
38.	Captan (Sum of captan and tetrahydrophthalimide (THPI), expressed as captan) (R) (A)	0.03*
39.	Carbaryl (F)	0.01*
40.	Carbendazim and benomyl (sum of benomyl and carbendazim expressed as carbendazim) (R)	0.30
41.	Carbofuran (sum of carbofuran (including any carbofuran generated from carbosulfan, benfuracarb or furathiocarb) and 3-OH carbofuran expressed as carbofuran) (R)	0.002*
42.	Carboxin (carboxin plus its metabolites carboxin sulfoxide and oxycarboxin (carboxin sulfone), expressed as carboxin)	0.03*
43.	Carfentrazone-ethyl (determined as carfentrazone and expressed as carfentrazone-ethyl)	0.01*
44.	Carpropamid	0.01*
45.	Cartap hydrochloride	0.01*
46.	Chlorantraniliprole	1.00
47.	Chlordane (cis & trans)	0.01*
48.	Chlorfenapyr	0.01*
49.	Chlorfenvinphos	0.01*
50.	Chlorfluazuron	0.01*
51.	Chlorimuron-ethyl	0.01*
52.	Chlormequat (CCC) (sum of chlormequat and its salts, expressed as chlormequat-chloride)	0.05
53.	Chlorothalonil	3.00
54.	Chlorpropham	0.01*
55.	Chlorpyrifos	0.01*
56.	Chlorpyrifos-methyl	1.00
57.	Chromafenozide	1.50
58.	Cinmethylen	0.01*
59.	Clethodim (sum of Sethoxydim and Clethodim including degradation	1.00

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
	products calculated as Sethoxydim)	
60.	Clodinafop and its S-isomers and their salts, expressed as clodinafop (F)	0.02*
61.	Clofentezine (R)	0.02*
62.	Clomazone	0.01*
63.	Clothianidin	0.70
64.	Coumachlor	0.01*
65.	Coumatetralyl	0.01*
66.	Cyantraniliprole	1.50
67.	Cyazofamid	2.00
68.	Cyenopyrofen	0.01*
69.	Cyflufenamid (sum of cyflufenamid (Z-isomer) and its E-isomer, expressed as cyflufenamid) (A) (R)	0.20
70.	Cyflumetofen	0.60
71.	Cyfluthrin (including other mixtures of constituent isomers sum of isomers)	0.30
72.	Cyhalofop-butyl	0.02*
73.	Cymoxanil	0.30
74.	Cypermethrin (including other mixtures of constituent isomers, sum of isomers)	0.50
75.	Cyproconazole	0.20
76.	Dazomet (Methylisothiocyanate resulting from the use of Dazomet and metam)	0.02*
77.	DDT (all isomers, sum of p,p'-DDT, o,p'-DDT, p,p'-DDE and p,p'-TDE (DDD) expressed as DDT)	0.05*
78.	Deltamethrin (cis-deltamethrin) (F)	0.20
79.	Diafenthiuron	0.01*
80.	Diazinon	0.01*
81.	Dichlorvos	0.01*
82.	Diclofop (sum diclofop-methyl and diclofop acid expressed as diclofop-methyl)	0.05*
83.	Diclosulam	0.01*
84.	Dicofol (sum of p,p' and o,p' isomers)	0.02*
85.	Dieldrin (see Aldrin)	0.01*
86.	Difenoconazole	3.00
87.	Diflubenzuron	0.01*
88.	Dimethoate	0.01*
89.	Dimethomorph (sum of isomers)	3.00
90.	Dinocap (sum of dinocap isomers and their corresponding phenols)	0.02*

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
	expressed as dinocap) (F)	
91.	Dinotefuran	0.90
92.	Diquat	0.01*
93.	Dithianon	3.00
94.	Dithiocarbamates (dithiocarbamates expressed as CS ₂ , including maneb, mancozeb, metiram, propineb, thiram and ziram)	5.00
95.	Diuron	0.01*
96.	Dodine	0.01*
97.	Edifenphos	0.01*
98.	Emamectin benzoate B 1a, expressed as emamectin	0.05
99.	Endosulphan (All isomers, sum of <i>alpha</i> - and <i>beta</i> -isomers and endosulphan sulphate expressed as endosulphan)	0.05*
100.	Endrin	0.01*
101.	Epoxiconazole	0.05*
102.	Ethephon	1.00
103.	Ethion	0.01*
104.	Ethiprole	0.01*
105.	Ethofenprox (Etofenprox)	4.00
106.	Ethoxysulfuron	0.01*
107.	Etoxazole	0.50
108.	Etrimfos	0.01*
109.	Famoxadone	2.00
110.	Fenamidone	0.60
111.	Fenarimol	0.30
112.	Fenazaquin	0.20
113.	Fenhexamid (F)	15.00
114.	Fenitrothion	0.01*
115.	Fenobucarb	0.01*
116.	Fenoxaprop-p	0.10
117.	Fenpropathrin	0.01*
118.	Fenpyroximate (A) (F) (R)	0.30
119.	Fenthion (fenthion and its oxygen analogue, their sulfoxides and sulfone expressed as parent)	0.01*
120.	Fenvalerate (any ratio of constituent isomers (RR, SS, RS & SR) including esfenvalerate) (F) (R)	0.30
121.	Fipronil (sum of fipronil + sulfone metabolite (MB46136) expressed as fipronil)	0.005*
122.	Flonicamid (sum of flonicamid, TNFG and TNFA expressed as flonicamid) (R)	0.03*

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
123.	Fluazifop-P (sum of all the constituent isomers of fluazifop, its esters and its conjugates, expressed as fluazifop)	0.01*
124.	Flubendiamide	2.00
125.	Flucetosulfuron	0.01*
126.	Fluchloralin	0.01*
127.	Fluensulfone	0.01*
128.	Flufenacet (sum of all compounds containing the N fluorophenyl-N-isopropyl moiety expressed as flufenacet equivalent)	0.05*
129.	Flufenoxuron	1.00
130.	Flufenzin	0.02*
131.	Flumioxazine	0.05*
132.	Fluopicolide	2.00
133.	Fluopyram	1.50
134.	Flupyradifurone	0.80
135.	Flusilazole	0.01*
136.	Fluthiacet-methyl	0.01*
137.	Fluxapyroxad	3.00
138.	Fomesafen	0.01*
139.	Forchlorfenuron (CPPU)	0.01*
140.	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl)	100.00
141.	Glufosinate-ammonium (sum of glufosinate, its salts, MPP and NAG expressed as glufosinate equivalents)	0.15
142.	Glyphosate	0.50
143.	Halosulfuron methyl	0.01*
144.	Haloxifop (Sum of haloxifop, its esters, salts and conjugates expressed as haloxifop (sum of the R- and S- isomers at any ratio)) (F) (R)	0.01*
145.	Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)	0.01*
146.	Hexachlorocyclohexane (HCH), alpha-isomer (F)	0.01*
147.	Hexachlorocyclohexane (HCH), beta-isomer (F)	0.01*
148.	Hexaconazole	0.01*
149.	Hexazinone	0.01*
150.	Hexythiazox	1.00
151.	Homobrassinolide	0.01*†
152.	Imazamox (Sum of imazamox and its salts, expressed as imazamox)	0.05*
153.	Imazethapyr	0.01*
154.	Imidacloprid	1.00

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
155.	Indaziflam	0.01*
156.	Indoxacarb (sum of indoxacarb and its R enantiomer) (F)	2.00
157.	Iodosulfuron-methyl (sum of iodosulfuron-methyl and its salts, expressed as iodosulfuron-methyl)	0.01*
158.	Iprobenphos	0.01*
159.	Iprodione	0.01*
160.	Iprovalicarb	2.00
161.	Isoprothiolane	0.01*
162.	Isoproturon	0.01*
163.	Kasugamycin	0.01*
164.	Kresoxim methyl	1.50
165.	Lambda-cyhalothrin (includes gamma-cyhalothrin) (sum of R,S and S,R isomers) (F)	0.08
166.	Lindane (Gamma-isomer of hexachlorocyclohexane (HCH)) (F)	0.01*
167.	Linuron	0.01*
168.	Lufenuron (any ratio of constituent isomers) (F)	0.01*
169.	Malathion (sum of malathion and malaixon expressed as malathion)	0.02*
170.	Mandipropamid (any ratio of constituent isomers)	2.00
171.	Matrine & Oxymatrine	0.01*
172.	Mepiquat (sum of mepiquat and its salts, expressed as mepiquat chloride)	0.02*
173.	Meptyldinocap (sum of 2,4-DNOPC and 2,4-DNOP expressed as meptyldinocap)	1.00
174.	Metaflumizone (sum of E- and Z- isomers)	0.05*
175.	Metalaxyl and Metalaxyl-M (metalaxyl including other mixtures of constituent isomers including metalaxyl-M (sum of isomers))	2.00
176.	Metaldehyde	0.05*
177.	Metamifop	0.01*
178.	Metamitron	0.10*
179.	Methabenzthiazuron	0.01*
180.	Methamidophos	0.01*
181.	Methomyl	0.01*
182.	Methoxyfenazide	1.00
183.	Metolachlor and S-Metolachlor (metolachlor including other mixtures of constituent isomers including S-metolachlor (sum of isomers))	0.05*
184.	Metrafenone	7.00
185.	Metribuzin	0.10*
186.	Metsulfuron-methyl	0.01*
187.	Milbemectin (sum of milbemycin A4 and milbemycin A3, expressed	0.02*

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
	as milbemectin)	
188.	Monocrotophos	0.01*
189.	Myclobutanil	1.00
190.	Nereistoxin	0.01*
191.	Nitenpyram	0.01*
192.	Novaluron	0.01*
193.	Omethoate	0.01*
194.	Orthosulfamuron	0.01*
195.	Oxadiargyl	0.01*
196.	Oxadiazon	0.05*
197.	Oxathiapiprolin	0.70
198.	Oxycarboxin	0.01*
199.	Oxydemeton- methyl (sum of oxydemeton methyl and demeton-S-methylsulfone expressed as oxydemeton-methyl)	0.01*
200.	Oxyfluorfen	0.10
201.	Paclobutrazol (sum of constituent isomers)	0.01*
202.	Paraquat	0.02*
203.	Parathion - methyl (sum of Parathion-methyl and paraoxon- methyl expressed as Parathion -methyl)	0.01*
204.	Parathion ethyl	0.05*
205.	Penconazole	0.50
206.	Pencycuron	0.05*
207.	Pendimethalin	0.05*
208.	Penflufen	0.01*
209.	Penoxsulam	0.01*
210.	Permethrin (sum of isomers)	0.05*
211.	Phenthoate	0.01*
212.	Phorate (sum of phorate, its oxygen analogue and their sulfones expressed as phorate)	0.01*
213.	Phosalone	0.01*
214.	Phosphamidon	0.01*
215.	Picoxystrobin	0.01*
216.	Pinoxaden	0.02*
217.	Pirimiphos-methyl	0.01*
218.	Pretilachlor	0.01*
219.	Prochloraz (sum of prochloraz and its metabolites containing the 2,4,6-Trichlorophenol moiety expressed as prochloraz)	0.05*
220.	Profenophos	0.01*
221.	Propamocarb (sum of propamocarb and its salt expressed as	0.01*

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
	propamocarb)	
222.	Propanil	0.01*
223.	Propargite	0.01*
224.	Propetamphos	0.01*
225.	Propiconazole (sum of isomers) (F)	0.30
226.	Propoxur	0.05*
227.	Pymetrozine	0.02*
228.	Pyraclostrobin	1.00
229.	Pyrazosulfuron-ethyl	0.01*
230.	Pyridaben	0.01*
231.	Pyridalyl	0.01*
232.	Pyriproxyfen	0.05*
233.	Pyriproxyfen	0.01*
234.	Pyroxasulfone	0.01*
235.	Quinalphos	0.01*
236.	Quinalphos	0.01*
236.	Quizalofop (sum of quizalofop, its salts, its esters (including propaquizafop) and its conjugates, expressed as quizalofop (any ratio of constituent isomers))	0.02*
237.	Simazine	0.20
238.	Spinetoram	0.50
239.	Spinosad (sum of Spinosyn A+D)	0.50
240.	Spirodiclofen	2.00
241.	Spiromesifen	0.02*
242.	Spirotetramat (Spirotetramat and its 4 metabolites BYI08330-enol, BYI08330-ketohydroxy, BYI08330-monohydroxy, and BYI08330 enol-glucoside, expressed as spirotetramat (R))	2.00
243.	Sulfentrazone	0.01*
244.	Sulfosulfuron	0.01*
245.	Sulfoxaflor (sum of isomers)	2.00
246.	<i>tau</i> -Fluvalinate	1.00
247.	Tebuconazole	0.50
248.	Tembotrione	0.02*
249.	Temephos	0.01*
250.	Tetraconazole	0.50
251.	Thiabendazole	0.01*
252.	Thiacloprid	0.01*
253.	Thiamethoxam	0.40
254.	Thifluzamide	0.01*
255.	Thiobencarb (4-chlorobenzyl methyl sulfone) (A)	0.01*

Sr. No.	Chemicals	Harmonized EU-MRL (mg/kg)
256.	Thiocyclam	0.01*
257.	Thiodicarb	0.01*
258.	Thiometon	0.01*
259.	Thiophanate-methyl	0.10*
260.	Tolfenpyrad	0.01*
261.	Topramezone	0.01*
262.	Transfluthrin	0.01*
263.	Triadimefon	0.01*
264.	Triadimenol (any ratio of constituent isomers)	0.30
265.	Triafamone	0.01*
266.	Tri-allate	0.1*
267.	Triasulfuron	0.01*
268.	Triazophos	0.01*
269.	Trichlorfon	0.01*
270.	Tricyclazole	0.01*
271.	Tridemorph	0.01*
272.	Trifloxystrobin	3.00
273.	Triflumezopyrim	0.01*
274.	Trifluralin	0.01*
275.	Uracil	1.00†

http://ec.europa.eu/sanco_pesticides/public/index.cfm?event=substance.selection

* Indicates lower limit of analytical determination

† These are natural products. The EU-MRL does not exist for these chemicals. Hence, their MRL is set at the LOQ of the method developed and validated at the National Referral Laboratory of ICAR-NRC for Grapes.