State of California

Department of Cannabis Control

California Code of Regulations, Title 4, Division 19

Proposed Regulation Text:

Pesticide Testing

KEY:

~~Red strikeout~~ indicates text proposed for deletion.

Blue underline indicates text proposed for addition.

§15719. Residual Pesticides Testing.

(a) The licensed laboratory must~~shall~~ analyze at minimum 0.5 grams of the representative sample of cannabis and cannabis products to determine whether residual pesticides are present.

(b) The licensed laboratory must~~shall~~ report ~~whether any Category I Residual Pesticides are detected above the limit of detection (LOD) and shall report~~ the result of the ~~Category II Residual Pesticides~~ residual pesticide testing in unit micrograms per gram (µg/g) on the COA. The laboratory must~~shall~~ indicate "pass" or "fail" on the COA.

(c) For each pesticide listed in the table below, the ~~The~~ licensed laboratory must~~shall~~ establish a limit of quantitation (LOQ) ~~of 0.10 µg/g or lower for all Category I Residual Pesticides~~ no greater than 50% of the indicated action level for that pesticide.

(d) A representative sample passes residual pesticide testing if pesticide residues found in the sample do not exceed the indicated action levels in the table below. ~~The sample shall be deemed to have passed the residual pesticides testing if both of the following conditions are met:~~

~~(1) The presence of any residual pesticide listed in the following tables in Category I are not detected, and~~

~~(2) The presence of any residual pesticide listed in the following tables in Category II does not exceed the indicated action levels.~~

(e) If a representative sample fails residual pesticide testing, then the batch from which the sample was collected fails residual pesticide testing and may not be released for retail sale.

~~Category I Residual Pesticide~~	~~CAS No.~~
~~Aldicarb~~	~~116-06-3~~

~~Carbofuran~~	~~1563-66-2~~
~~Chlordane~~	~~57-74-9~~
~~Chlorfenapyr~~	~~122453-73-0~~
~~Chlorpyrifos~~	~~2921-88-2~~
~~Coumaphos~~	~~56-72-4~~
~~Daminozide~~	~~1596-84-5~~
~~DDVP (Dichlorvos)~~	~~62-73-7~~
~~Dimethoate~~	~~60-51-5~~
~~Ethoprop(hos)~~	~~13194-48-4~~
~~Etofenprox~~	~~80844-07-1~~
~~Fenoxycarb~~	~~72490-01-8~~
~~Fipronil~~	~~120068-37-3~~
~~Imazalil~~	~~35554-44-0~~
~~Methiocarb~~	~~2032-65-7~~
~~Methyl parathion~~	~~298-00-0~~
~~Mevinphos~~	~~7786-34-7~~
~~Paclobutrazol~~	~~76738-62-0~~
~~Propoxur~~	~~114-26-1~~
~~Spiroxamine~~	~~118134-30-8~~
~~Thiacloprid~~	~~11988-49-9~~

~~***Category II Residual*** ***Pesticide*~~	***CAS No.***	***Action Level (µg/g) for Inhalable Cannabis and Cannabis Products***	***Action Level (µg/g) for Non-Inhalable Cannabis Products***
Abamectin	71751-41-2	0.10	~~0.3~~0.10
Acephate	30560-19-1	0.10	~~5~~0.14
Acequinocyl	57960-19-7	0.10	~~4~~ 3.7
Acetamiprid	135410-20-7	~~0.1~~ 3.0	5.0

~~Category II~~ ~~Residual~~ Pesticide	CAS No.	Action Level (µg/g) for Inhalable Cannabis and Cannabis Products	Action Level (µg/g) for Non-Inhalable Cannabis Products
Aldicarb	116-06-3	0.50	0.014
Azoxystrobin	131860-33-8	~~0.1~~ 16.0	~~40~~ 30.0
Bifenazate	149877-41-8	0.10	5.0
Bifenthrin	82657-04-3	3.0	~~0.5~~1.6
Boscalid	188425-85-6	0.10	~~10~~11
Buprofezin	69327-76-0	0.10	60
Captan (incl. THPI)	133-06-2	0.70	5.0
Carbaryl	63-25-2	0.50	0.50
Carbendazim	10605-21-7	2.0	5.0
Carbofuran	1563-66-2	0.50	0.0050
Chlorantraniliprole	500008-45-7	~~10~~ 14.0	40.0
Chlordane	5103-71-9 (cis), 5103-74-2 (trans)	0.10	0.050
Chlorfenapyr	122453-73-0	0.10	2.5
Chlorpyrifos	2921-88-2	0.50	0.0050
Clofentezine	74115-24-5	0.10	~~0.5~~0.65
Coumaphos	56-72-4	0.10	0.010
Cyfluthrin	68359-37-5	2.0	~~1~~0.59
Cypermethrin	52315-07-8	1.0	~~1~~0.70
Cyprodinil	121552-61-2	0.10	50.0
Dacthal (DPCA)	1861-32-1	0.10	0.050
Daminozide	1596-84-5	0.10	0.10
DDVP (Dichlorvos)	62-73-7	0.10	0.042
Diazinon	333-41-5	0.10	~~0.2~~0.15
Dimethoate	60-51-5	0.10	2.0
Dimethomorph	110488-70-5	2.0	~~20~~13.0

~~Category II~~ ~~Residual~~ Pesticide	CAS No.	Action Level (µg/g) for Inhalable Cannabis and Cannabis Products	Action Level (µg/g) for Non-Inhalable Cannabis Products
Ethoprop(hos)	13194-48-4	0.10	0.020
Etofenprox	80844-07-1	0.10	5.0
Etoxazole	153233-91-1	0.10	1.5
Fenhexamid	126833-17-8	0.10	~~10~~19.0
Fenoxycarb	72490-01-8	0.10	3.0
Fenpyroximate	111812-58-9	0.10	~~2~~4.0
Fenobucarb (BPMC)	3766-81-2	0.010	0.010
Fipronil	120068-37-3	0.10	0.030
Flonicamid	158062-67-0	0.10	~~2~~6.0
Fludioxonil	131341-86-1	0.10	~~30~~25
Fluopyram	658066-35-4	5.0	25.0
Hexythiazox	78587-05-0	0.10	~~2~~6.0
Imazalil	35554-44-0	0.10	5.0
Imidacloprid	138261-41-3	5.0	3.0
Isoprocarb (MIPC)	2631-40-5	0.010	0.010
Kresoxim-methyl	143390-89-0	0.10	1.0
Malathion	121-75-5	0.50	~~5~~8.0
Metalaxyl	57837-19-1	2.0	15.0
Methamidophos	10265-92-6	1.0	0.049
Methiocarb	2032-65-7	0.20	0.015
Methomyl	16752-77-5	1.0	~~0.1~~0.075
Methyl parathion	298-00-0	0.10	0.0013
Mevinphos	7786-34-7	0.040	0.017
Monocrotophos	6923-22-4	0.30	0.0030
Myclobutanil	88671-89-0	0.10	9.0

~~Category II~~ ~~Residual~~ Pesticide	CAS No.	Action Level (µg/g) for Inhalable Cannabis and Cannabis Products	Action Level (µg/g) for Non-Inhalable Cannabis Products
Naled	300-76-5	0.10	~~0.5~~0.16
Omethoate	1113-02-6	0.10	1.8
Oxamyl	23135-22-0	0.50	~~0.2~~0.13
Paclobutrazol	76738-62-0	0.10	5.0
Pentachloronitrobenzene	82-68-8	0.10	~~0.2~~1.0
Permethrin	52645-53-1	0.50	20.0
Phosmet	732-11-6	0.10	~~0.2~~0.070
Piperonyl butoxide	51-03-6	3.0	8.0
Prallethrin	23031-36-9	0.10	~~0.4~~1.0
Procymidone	32809-16-8	0.005	0.005
Propiconazole	60207-90-1	0.10	20.0
Propoxur	114-26-1	0.10	0.019
Pymetrozine	123312-89-0	1.0	0.40
Pyraclostrobin	175013-18-0	0.10	2.5
Pyrethrins	8003-34-7	0.50	1.0
Pyridaben	96489-71-3	0.10	3.0
Pyrimethanil	53112-28-0	0.10	15.0
Spinetoram	~~187166-15-0,~~ ~~187166-40-1~~ 935545-74-7	0.10	~~3~~2.5
Spinosad	131929-60-7, ~~131929-63-0~~ 168316-95-8	0.10	~~3~~2.5
Spiromesifen	283594-90-1	0.10	~~12~~1.9
Spirotetramat	203313-25-1	0.10	13.0
Spiroxamine	118134-30-8	0.10	0.70
Tebuconazole	107534-96-3	~~0.1~~18	~~2~~1.5

~~*Category II Residual* Pesticide~~	*CAS No.*	*Action Level (µg/g) for Inhalable Cannabis and Cannabis Products*	*Action Level (µg/g) for Non-Inhalable Cannabis Products*
Thiacloprid	111988-49-9	0.10	1.0
Thiamethoxam	153719-23-4	5.0	4.5
Trifloxystrobin	141517-21-7	0.10	30.0

~~(e) If the sample fails residual pesticides testing, the batch from which the sample was collected fails residual pesticides testing and shall not be released for retail sale.~~

NOTE: Authority cited: Section 26013, Business and Professions Code.
Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

§15731. Limits of Detection (LOD) and Limits of Quantitation (LOQ) for Quantitative Analyses.

(a) The licensed laboratory ~~shall~~ must calculate the LOD for chemical method analyses ~~according to any of the following methods:~~ using the standard

~~(1) Signal-to-noise ratio of between 3:1 and 2:1;~~

~~(2) Standard~~ deviation of the response and the slope of calibration curve using a minimum of 7 spiked blank samples calculated as follows; LOD = (3.3 x standard deviation of the response) / slope of the calibration curve.~~;~~ ~~or~~

~~(3) A method published by the United States Food and Drug Administration (USFDA) or the United States Environmental Protection Agency (USEPA).~~

(b) For chromatographic analyses, the LOD must have a minimum signal-to-noise ratio of 3:1, which must be verified by visual inspection. For non-chromatographic analyses, the LOD must have a minimum signal-to-noise ratio of 3:1, which must be verified by software analysis or mathematical calculation.

(c) The licensed laboratory ~~shall~~ must calculate the LOQ for chemical method analyses ~~according to any of the following methods:~~ using the standard

~~(1) Signal-to-noise ratio of 10:1, at minimum;~~

~~(2) Standard~~ deviation of the response and the slope using a minimum of 7 spiked blank samples calculated as follows:

LOQ = (10 x standard deviation of the response) / slope of the calibration curve.~~;~~ ~~or~~

~~(3) A method published by the USFDA or the USEPA.~~

(d) For chromatographic analyses, the LOQ must have a minimum signal-to-noise ratio of 10:1, which must be verified by visual inspection. For non-chromatographic analyses, the LOQ must have a minimum signal-to-noise ratio of 10:1, which must be verified by software analysis or mathematical calculation.

NOTE: Authority cited: Section 26013, Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.