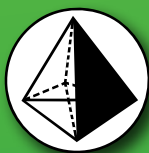


Standards for Cannabis Testing



AccuStandard[®]

Cannabis Standards

AccuStandard offers standards for testing cannabinoids, terpenes, pesticide contaminants and residual solvents. Since the requirements differ by state, we have developed standards specific to state requirements. For additional information, contact our Technical Service Department.

Cannabis Terpenes

Cannabis Terpenes

SOLUTIONS at 100 µg/mL in PT Methanol, 1 mL

Compound	CAS	Cat. No.
(-)-alpha-Bisabolol	23089-26-1	CP-TER-001S
beta-Pinene	18172-67-3	CP-TER-002S
(-)-Borneol	464-45-9	CP-TER-003S
(-)-Caryophyllene oxide	1139-30-6	CP-TER-004S
(-)-Guaiol	489-86-1	CP-TER-005S
(-)-Isopulegol	89-79-1	CP-TER-006S
(+)-Borneol	464-43-7	CP-TER-007S
(+)-Fenchone	4695-62-9	CP-TER-008S
Eucalyptol	470-82-6	CP-TER-009S
alpha-Humulene	6753-98-6	CP-TER-010S
alpha-Pinene	80-56-8	CP-TER-011S
alpha-Terpinene	99-86-5	CP-TER-012S
beta-Caryophyllene	87-44-5	CP-TER-013S
beta-Myrcene	123-35-3	CP-TER-014S
Camphene	79-92-5	CP-TER-015S
Camphor	76-22-2	CP-TER-016S
3-Carene	13466-78-9	CP-TER-017S
(R)-Limonene	5989-27-5	CP-TER-018S
gamma-Terpinene	99-85-4	CP-TER-019S
Geraniol	106-24-1	CP-TER-020S
(1R)-(-)-Fenchone	7787-20-4	CP-TER-021S
Linalool	78-70-6	CP-TER-022S
Nerolidol	7212-44-4	CP-TER-023S
Ocimene	13877-91-3	CP-TER-024S
p-Cymene	99-87-6	CP-TER-025S
Terpinolene	586-62-9	CP-TER-026S
Valencene (Tech)	4630-07-3	CP-TER-027S
Terpineol	8000-41-7	CP-TER-028S
Farnesene (mixture of isomers)		CP-TER-029S

Cannabis Terpene Mix Set

CP-TER-MIX-SET

2 x 1 mL
CP-TER-MIX-001, CP-TER-MIX-002

Cannabis Terpene Mix 1

CP-TER-MIX-001

100 µg/mL each in PT Methanol

1 mL
14 comps.

(-)-alpha-Bisabolol	Camphene
(-)-Caryophyllene oxide	Camphor
(-)-Isopulegol	Linalool
(+)-Fenchone	Nerolidol
Eucalyptol	Ocimene
beta-Caryophyllene	Valencene (Tech)
beta-Myrcene	3-Carene

Cannabis Terpene Mix 2

CP-TER-MIX-002

100 µg/mL each in PT Methanol

1 mL
14 comps.

beta-Pinene	(R)-Limonene
(-)-Guaiol	gamma-Terpinene
(+)-Borneol	Geraniol
(-)-Borneol	(1R)-(-)-Fenchone
alpha-Humulene	p-Cymene
alpha-Pinene	Terpinolene
alpha-Terpinene	Terpineol

Cannabinoid Standards

Each at 1000 µg/mL in PT Methanol

1 mL

Compound	CAS	Cat. No.
Cannabidiol (CBD)	13956-29-1	CP-CBD-01S
Delta-8-Tetrahydrocannabinol (THC-8)	5957-75-5	CP-8-THC-01S
Delta-9-Tetrahydrocannabinol (THC-9)	1972-08-3	CP-9-THC-01S
Delta-9-Tetrahydrocannabinolic acid A (THCA-A)	23978-85-0	CP-THCA-A-01S
Cannabigerol (CBG)	25654-31-3	CP-CBG-01S
Cannabichromene (CBC)	20675-51-8	CP-CBC-01S

**Restrictions may apply,
contact us for information.**



California Cannabis Residual Pesticides

California Category I Residual Pesticide Mix

CP-CA-01 1 mL
100 µg/mL each in Acetonitrile 20 comps.

Alar	Dichlorvos	Methiocarb
Aldicarb	Dimethoate	Mevinphos
Baygon	Ethoprop	Paclobotrazol
Carbofuran	Etofenprox	Parathion-methyl
Chlorfenapyr	Fenoxycarb	Spiroxamine
Coumaphos	Fipronil	Thiacloprid
Dursban	Imazalil	

California Category II Residual Pesticide (Single) (Chlordane tech)

CP-CA-02 1 mL
100 µg/mL in Methanol

Chlordane (tech)

California Category III Residual Pesticide Mix

CP-CA-03 1 mL
100 µg/mL each in Acetonitrile 29 comps.

Acetamidrid	Fenpyroximate	Oxamyl
Azoxystrobin	Fonicamid	Pyridaben
Bifenazate	Fludioxonil	Spinetoram
Boscalid	Etoazole	Spinosad
Captan	Hexythiazox	Spirotetramat
Carbaryl	Imidacloprid	Tebuconazol
Chlorantraniliprole	Kresoxim-methyl	Thiamethoxam
Clofentezine	Metalaxyl	Tilt
Dimethomorph	Methomyl	Trifloxystrobin
Fenhexamid	Myclobutanil	

California Category IV Residual Pesticide Mix

CP-CA-04 1 mL
100 µg/mL each in Acetonitrile 16 comps.

Abamectin	Diazinon	Permethrin
Acequinocyl	Imidan	Piperonyl butoxide
Acephate	Malathion	Prallethrin
Bifenthrin	Naled	Pyrethrins
Cyfluthrin	Pentachloro-nitrobenzene	Spiromesifen
Cypermethrin		

California Cannabis Residual Solvents

California Residual Solvent Category I Mix

CP-CA-RS-01 1 mL
5000 µg/mL each in Methanol 5 comps.

1,2-Dichloroethane	Chloroform	Trichloroethene
Benzene	Dichloromethane	

California Residual Solvent Category II (Single)

CP-CA-RS-02 1 mL
5000 µg/mL in Water

Ethylene oxide

California Residual Solvent Category III Mix

CP-CA-RS-03 1 mL
5000 µg/mL each in Water 7 comps.

Acetone	Ethyl acetate	Isopropanol
Acetonitrile	Diethyl ether	Methyl alcohol
Ethanol		

California Residual Solvent Category IV Mix

CP-CA-RS-04 1 mL
5000 µg/mL each in Ethanol 7 comps.

n-Heptane	Toluene	p-Xylene
n-Hexane	o-Xylene	m-Xylene
n-Pentane		

California Residual Solvent Category V (gasses) Mix

CP-CA-RS-05 1 mL
5000 µg/mL each in Ethanol 2 comps.

n-Butane	n-Propane
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Colorado Cannabis Residual Pesticides

Colorado Cannabis Residual Pesticide Mix

CP-CO-01 1 mL
100 µg/mL each in Acetonitrile 13 comps.

Abamectin	Imidacloprid	Spinosad
Azoxystrobin	Malathion	Spiromesifen
Bifenazate	Myclobutanil	Spirotetramat
Etoazole	Permethrin	Tebuconazol
Imazalil		

Massachusetts Cannabis Residual Pesticides

Massachusetts Cannabis Residual Pesticide Mix

CP-MA-01 1 mL
100 µg/mL each in Acetonitrile 9 comps.

Bifenazate	Etoazole	Myclobutanil
Bifenthrin	Imazalil	Spiromesifen
Cyfluthrin	Imidacloprid	Trifloxystrobin

Nevada Cannabis Residual Pesticides

Nevada Cannabis Residual Pesticide Mix

CP-NV-PEST 1 mL
100 µg/mL each in Acetonitrile 25 comps.

Abamectin	Etoazole	Pyrethrins
Acequinocyl	Fenhexamid	Quintozene
Alar	Fonicamid	Spinetoram
Bifenazate	Fludioxonil	Spinosad
Bifenthrin	Imazalil	Spirotetramat
Captan	Imidacloprid	Thiamethoxam
Cyfluthrin	Myclobutanil	Thiophanate-methyl
Cypermethrin	Piperonyl butoxide	Trifloxystrobin
Dimethomorph		



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Oregon Cannabis Residual Pesticides and Solvents,
and Heavy Metals on next page

Oregon Cannabis Residual Pesticides

The Oregon Health Association (OHA) has classified and submitted three prioritized groupings of residue cannabis pesticides:

• **Fungicides** • **Pyrethroids** • **Organophosphates**

In June of 2015, a white paper titled "Pesticide Use on Cannabis" published by the Cannabis Safety Institute originally contained 188 active compounds.

From the targeted 188 active compounds, a working group with the OHA had numerous analytical laboratories study the toxicological effects and the historical natural application of each of the compounds for crop and human ingestion. The results reduced the original number of targeted compounds to 59 pesticides. These pesticides remain on the State of Oregon list. AccuStandard, Inc. offers three individual mixes of these 59 compounds.

Oregon Cannabis Residual Pesticide Set

CP-ORE-SET

3 x 1 mL

CP-ORE-01, CP-ORE-02, CP-ORE-03

Oregon Cannabis Residual Pesticide Mix 1

CP-ORE-01

1 mL

100 µg/mL each in Acetonitrile

20 comps.

Abamectin	Daminozide	Methomyl
Acequinocyl	(E)-Fenpyroximate	Oxamyl
Aldicarb	Fenoxycarb	Propoxur
Carbaryl	Fonicamid	Spinosad
Carbofuran	Hexythiazox	Spirotetramat
Chlorantraniliprole	Imidacloprid	Thiamethoxam
Clofentazine	Methiocarb	

Oregon Cannabis Residual Pesticide Mix 2

CP-ORE-02

1 mL

100 µg/mL each in Acetonitrile

16 comps.

Acephate	Dursban	Naled
Bifenthrin	Ethoprop	Permethrin
Cyfluthrin	Etofenprox	Phosmet
Cypermethrin	Malathion	Prallethrin
Diazinon	Methyl parathion	Pyrethrins
Dimethoate		

Oregon Cannabis Residual Pesticide Mix 3

CP-ORE-03

1 mL

100 µg/mL each in Acetonitrile

23 comps.

Acetamidprid	Fludioxonil	Propiconazole
Azoxystrobin	Imazalil	Pyridaben
Bifenazate	Kresoxim-methyl	Spiromesifen
Boscalid	Metalaxyl	Spiroxamine
Chlorfenapyr	MGK-264	Tebuconazol
Dichlorvos	Myclobutanil	Thiacloprid
Etoazole	Paclobutrazol	Trifloxystrobin
Fipronil	Piperonyl butoxide	

Oregon Cannabis Residual Solvents

Oregon Cannabis Residual Solvent Mix 1

CP-ORE-RS-01

1 mL

1000 µg/mL each in Water

11 comps.

Acetone	2-Ethoxyethanol	Isopropyl acetate
Acetonitrile	Ethyl acetate	Methanol
sec-Butanol	Ethyl ether	Isopropanol
1,4-Dioxane	Ethylene glycol	

Oregon Cannabis Residual Solvent Mix 2

CP-ORE-RS-02

1 mL

1000 µg/mL each in Ethanol

18 comps.

Benzene	n-Heptane	n-Pentane
Cumene	Hexane	Tetrahydrofuran
Cyclohexane	Ethylbenzene	Toluene
Dichloromethane	Isopentane	o-Xylene
2,2-Dimethylbutane	2-Methylpentane	p-Xylene
2,3-Dimethylbutane	3-Methylpentane	m-Xylene

Oregon Cannabis Residual Solvent Mix 3

CP-ORE-RS-03

1 mL

1000 µg/mL each in Ethanol

4 comps.

sec-Butanol	Isobutane
n-Propane	Neopentane

Oregon Cannabis Residual Solvent (Single)

CP-ORE-RS-04 *

1 mL

1000 µg/mL in Ethanol

Ethylene oxide

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Heavy Metals

Element	Starting Material	Matrix	1000 µg/mL	
			Cat. No.	Unit
Arsenic (As)	As	2-5% Nitric acid	ICP-03N-1	100 mL
			ICP-03N-5	500 mL
Cadmium (Cd)	Cd	2-5% Nitric acid	ICP-08N-1	100 mL
			ICP-08N-5	500 mL
Chromium (Cr)	(NH ₄) ₂ Cr ₂ O ₇	2-5% Nitric acid	ICP-13N-1	100 mL
			ICP-13N-5	500 mL
Lead (Pb)	Pb(NO ₃) ₂	2-5% Nitric acid	ICP-29N-1	100 mL
			ICP-29N-5	500 mL
Mercury (Hg)	Hg	10% Nitric acid	ICP-34N-1	100 mL
			ICP-34N-5	500 mL
Nickel (Ni)	Ni	2-5% Nitric acid	ICP-37N-1	100 mL
			ICP-37N-5	500 mL
Thallium (Tl)	Tl	2-5% Nitric acid	ICP-60N-1	100 mL
			ICP-60N-5	500 mL

* ColdPAK required to maintain integrity of product.

Canada Cannabis Regulatory Standards

Starting January 2019, Canada will require Licensed Producers (LPs) to submit samples of all cultivated cannabis products to independent laboratories for testing of almost 100 pesticides. As of now, the Pesticide Management Regulatory Agency (PMRA) has maintained a database that includes 22 registered pesticides for use on cannabis products. Due to the launch of nationwide use of recreational cannabis for Canada, Health Canada (HC) will be testing these products for assurance of a healthy product for the end user. Below is the current published listing of regulated pesticides that have been approved by the Government of Canada, for both recreational and medicinal usage.



Canada Cannabis Residual Pesticides

Canada Cannabis Pesticide Set

CP-CAN-SET 5 x 1 mL
CP-CAN-01, CP-CAN-02, CP-CAN-03, CP-CAN-04, P-711S

Canada Cannabis Pesticide Mix 1

CP-CAN-01 1 mL
100 µg/mL each in Acetonitrile 36 comps.

Allethrin	Endosulfan II	Phenothrin
Buprofezin	Endosulfan sulfate	Pirimicarb
Clothianidin	Etridiazole	Pyraclostrobin
Coumaphos	Fensulfothion	Quintozene
Cyantraniliprole	Fenthion	Resmethrin
Cyprodinil	Fenvalerate	Spinetoram
Deltamethrin	Fluopyram	Spirodiclofen
Dichlorvos	Iprodione	Tebufenozide
Dinotefuran	Kinoprene	Teflubenzuron
Dimethomorph	Methoprene	Tetrachlorvinphos
Dodemorph	Mevinphos	Tetramethrin
Endosulfan I	Novaluron	Thiophanate-methyl

Canada Cannabis Pesticide Mix 2

CP-CAN-02 1 mL
100 µg/mL each in Acetonitrile 20 comps.

Abamectin	Daminozide	Methomyl
Acequinocyl	Fenoxycarb	Oxamyl
Carbaryl	(E)-Fenpyroximate	Propoxur
Carbofuran	Fonicamid	Spinosad
Chlorantraniliprole	Hexythiazox	Spirotetramat
Clofentezine	Imidacloprid	Thiamethoxam
Clofentezine	Methiocarb	

Canada Cannabis Pesticide Mix 3

CP-CAN-03 1 mL
100 µg/mL each in Acetonitrile 23 comps.

Acetamiprid	Fludioxonil	Propiconazole
Azoxystrobin	Imazalil	Pyridaben
Bifenazate	Kresoxim-methyl	Spiromesifen
Boscalid	Metalaxyl	Spiroxamine
Chlorfenapyr	MGK-264	Tebuconazole
Dichlorvos	Myclobutanil	Thiacloprid
Etoxazole	Paclobutrazol	Trifloxystrobin
Fipronil	Piperonyl butoxide	

Canada Cannabis Pesticide Mix 4

CP-CAN-04 1 mL
100 µg/mL each in Acetonitrile 16 comps.

Acephate	Dursban	Naled
Bifenthrin	Ethoprop	Permethrin
Cyfluthrin	Etofenprox	Phosmet
Cypermethrin	Malathion	Prallethrin
Diazinon	Methyl parathion	Pyrethrins
Dimethoate		

Azadirachtin

P-711S 1 mL
100 µg/mL in Methanol

Canada Cannabis Residual Solvents

Canada Cannabis Residual Solvent Mix 1

CP-CAN-RS-01 1 mL
5000 µg/mL each in PT Methanol 24 comps.

Acetic acid	Ethyl ether	2-Methyl-1-propanol
Anisole	Ethyl formate	MtBE
1-Butanol	Formic acid	Pentane
2-Butanol	Isobutyl acetate	1-Pentanol
Butyl acetate	Isopropyl acetate	1-Propanol
DMSO	Heptane	2-Propanol
Ethanol	Methyl acetate	Propyl acetate
Ethyl acetate	3-Methyl-1-butanol	Triethylamine

Canada Cannabis Residual Solvent Mix 2

CP-CAN-RS-02 1 mL
5000 µg/mL each in PT Methanol 2 comps.

Acetone	Methyl ethyl ketone
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Canada Cannabis Residual Solvent Mix 3 (Gases)

CP-CAN-RS-03 1 mL
500 µg/mL each in PT Methanol 3 comps.

n-Butane	Propane
Isobutane	



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