

Analytical Standards for Medicinal and Recreational Cannabis Testing

While the legalization of cannabis, for both medicinal and recreational purposes, has been gaining speed, legislation and regulation has not necessarily kept pace. Even so, out of a drive for self-regulation and significant consumer safety concerns, many producers and manufacturers are turning to testing labs in order to ensure that their products are of high quality and free of chemical contaminants. SPEX CertiPrep offers ISO 17034 Certified Reference Materials (CRMs) for all of the common contaminants such as pesticide residues, residual solvents and heavy metals, as well as qualitative analysis CRMs such as terpenes. As the industry demands change and regulations are put into place, we continually update our product offerings.

For additional product information, please visit www.spexcertiprep.com/cannabis.

Designed for Methods: State Specific Pesticide Regulations

• OAR 333-008-11 • HB 3460 • AOAC 2007.01 • EN 15662

Pesticide Residues							
Description	Concentration	Volume	Matrix	Part #			
Organochlorine Pesticides Mix A, 18 compounds	200 μg/mL	1 mL	Acetone	5252-PA			
Organochlorine Pesticides Mix B, 15 compounds	200 μg/mL	1 mL	Acetone	5252-PB			
Nitrogen-Phosphorus Pesticides Mix D, 9 compounds	200 μg/mL	1 mL	Acetone	5252-PD			
Nitrogen-Phosphorus Pesticides Mix E, 3 compounds 200 µg/mL		1 mL	Acetone	5252-E			

Terpenes								
Components	CAS#	Concentration	Volume	Matrix	Part #			
Borneol	507-70-0	1,000 μg/mL	1 mL	Methanol-P&T	S-4570			
Eucalyptol	470-82-6	1,000 μg/mL	1 mL	Methanol	S-4352			
(R)-(+)-Limonene	5989-27-5	1,000 μg/mL	1 mL	Methanol-P&T	S-4021			
Linalool	78-70-6	1,000 μg/mL	1 mL	Methanol	S-5133			
alpha-Pinene	80-56-8	1,000 μg/mL	1 mL	Methanol-P&T	S-4172			
beta-Pinene	127-91-3	1,000 μg/mL	1 mL	Methanol-P&T	S-3142			

CERTIFIED REFERENCE MATERIALS



Cannabis (cont'd)

Residual Solvents						
Components	CAS#	Concentration	Volume	Matrix	Part #	
Residual Solvent Mix, 24 compounds	Multiple	1,000 μg/mL	1 mL	Dimethyl sulfoxide	USP-RS-C3A	
Acetone	67-64-1	1,000 μg/mL	1 mL	Methanol-P&T	S-140	
n-Butane	106-97-8	1,000 μg/mL	1 mL	Methanol-P&T	S-605	
Ethane	74-84-0	1,000 μg/mL	1 mL	Methanol-P&T	S-1880	
Ethanol	64-17-5	1,000 μg/mL	1 mL	Methanol-P&T	S-1885	
n-Hexane	110-54-3	1,000 μg/mL	1 mL	Methanol-P&T	S-2190	
Methane	74-82-8	1,000 μg/mL	1 mL	Methanol-P&T	S-2379	
2-Methylbutane	78-78-4	1,000 μg/mL	1 mL	Methanol-P&T	S-2462	
2-Methylpropane	75-28-5	1,000 μg/mL	1 mL	Methanol-P&T	S-2555	
n-Pentane	109-66-0	1,000 μg/mL	1 mL	Methanol-P&T	S-2975	
Propane	74-98-6	1,000 μg/mL	1 mL	Methanol-P&T	S-3145	
2-Propanol	67-63-0	1,000 μg/mL	1 mL	Methanol-P&T	S-3165	

	CAN-TERP Mix 1 In Methanol								
Components	5	CAS#	Compone	nts		CAS#	Components		CAS#
(-)-alpha-Bisabo	olol	23089-26-1	Eucalyptol		470-82-6	Linalool		78-70-6	
Camphene		79-92-5	Farnesene (mix o	Farnesene (mix of Isomers)		502-61-4	p-Mentha-1,5-diene		99-83-2
Camphor		76-22-2	(+)-Fenchone			4695-62-9	beta-Myrcene		123-35-3
(1S)-(+)-3-Care	ne	498-15-7	Geranyl acetate			105-87-3	Nerol		106-25-2
(-)-Caryophyllene	oxide	1139-30-6	30-6 Hexahydrothy			89-78-1	cis-Nerolidol		3790-78-1
trans-Caryophyll	ene	87-44-5	Isoborne	ol		124-76-5	Ocimene (mix of isome	ers)	13877-91-3
(+)-Cedrol		77-53-2	(-)-Isopule	(-)-Isopulegol		89-79-2	Valencene		4630-07-3
Concentration	Volu	ume	Part #		Co	oncentration	Volume		Part #
100 μg/mL	1 r	mL	CAN-TERP-MIX1		1	,000 μg/mL	1 mL	CAN-	TERP-MIX1H

	CAN-TERP Mix 2 In Methanol								
Component	5	CAS#	CAS # Components			CAS#	Components		CAS#
(+)-Borneol		464-43-7	464-43-7 Geraniol			106-24-1	(+)-Pulegone		89-82-7
(-)-Borneol		464-45-9	464-45-9 Guaiol			489-86-1	alpha-Terpinene		99-86-5
(1R)-(+)-Camph	nor	464-49-3 alpha-H		llene	6753-98-6 gamma-Terpir		gamma-Terpinene		99-85-4
(1S)-(-)-Camph	or	464-48-2	(R)-(+)-Limonene			5989-27-5	Terpinolene		586-62-9
alpha-Cedren	e	469-61-4	trans-Nerolidol			40716-66-3	Terpineol (mix of isomers)		8000-41-7
L(-)-Fenchone	9	7787-20-4	a-Pinene	5		80-56-8	Sabinene		3387-41-5
(1R)-endo-(+)-Fenchy	ıl alcohol	2217-02-9 beta-Pine		ne	127-91-3 Sabinene hydrate			546-79-2	
Concentration	Volu	ıme Part#			Co	oncentration	Volume		Part #
100 μg/mL	1 r	nL	CAN-TERP-MIX2		1	,000 μg/mL	1 mL	CAN-	TERP-MIX2H



Cannabis (cont'd)

CAN-TERP Kit in Methanol						
Kit Contains						
CAN-TERP-MIX1			CAN-TERP-MIX2			
	Concentration V		ıme	Part #		
	100 μg/mL	1 mL		CAN-TERP-KIT		

CAN-TERP Kit (High Level) in Methanol						
Kit Contains						
CAN-TERP-MIX1H				CAN-T		
	Concentration	Volume		Part #		
	1,000 μg/mL 1 n			CAN-TERP-KIT-H		

DEA Controlled Substances							
Components	CAS#	Concentration	Volume	Matrix	Part #		
Cannabidiol (CBD)	13956-29-1	1,000 μg/mL	1 mL	Methanol	S-10241		
Cannabinol (CBN)	521-35-7	1,000 μg/mL	1 mL	Methanol	S-10242		
Cannabidivarin (CBDV)	24274-48-4	1,000 μg/mL	1 mL	Methanol	S-10245		
Cannabigerol (CBG)	2808-33-5	1,000 μg/mL	1 mL	Methanol	S-10246		
Cannabigerolic acid (CBGA)	25555-57-1	1,000 μg/mL	1 mL	Acetonitrile	S-10247		
Cannabichromene (CBC)	20675-51-8	1,000 μg/mL	1 mL	Methanol	S-10248		
Cannabidolic acid (CBDA)	1244-58-2	1,000 μg/mL	1 mL	Acetonitrile	S-10249		
(-)-delta9-THC	1972-08-3	1,000 μg/mL	1 mL	Methanol	S-10260		
(-)-delta8-THC	5957-75-5	1,000 μg/mL	1 mL	Methanol	S-10261		
Cannabidivarinic acid (CBDVA)	31932-13-5	1,000 μg/mL	1 mL	Acetonitrile	S-11055		
Tetrahydrocannabinolic acid (THCA)	23978-85-0	1,000 μg/mL	1 mL	Acetonitrile	S-11056		
Tetrahydrocannabivarin (THCV)	31262-37-0	1,000 μg/mL	1 mL	Methanol	S-11057		
Tetrahydrocannabivarinic acid (THCVA)	28172-17-0	1,000 μg/mL	1 mL	Acetonitrile	S-11058		
Cannabichromenic acid (CBCA)	20408-52-0	1,000 μg/mL	1 mL	Acetonitrile	S-11059		

Heavy Metals							
Components	Concentration	Volume	Matrix	Part #			
Heavy Metals Mix, 4 Metals	Multiple	125 mL	5% HNO ₃	USP-TXM2			
Arsenic	1,000 μg/mL	125 mL	2% HNO ₃	PLAS2-2Y			
Cadmium	1,000 μg/mL	125 mL	2% HNO ₃	PLCD2-2Y			
Chromium	1,000 μg/mL	125 mL	2% HNO ₃	PLCR2-2Y			
Lead	1,000 μg/mL	125 mL	2% HNO ₃	PLPB2-2Y			
Mercury	1,000 μg/mL	125 mL	10% HNO ₃	PLHG4-2Y			
Nickel	1,000 μg/mL	125 mL	2% HNO ₃	PLNI2-2Y			
Silver	1,000 μg/mL	125 mL	2% HNO ₃	PLAG2-2Y			
Thallium	1,000 μg/mL	125 mL	2% HNO ₃	PLTL2-2Y			



Cannabis (cont'd)

OdorEroder®

OdorEroder® effectively neutralizes a wide range of offensive chemical odors and fumes in the lab, everything from Aldehydes to Xylene. These non-toxic, environmentally safe purple beads are placed where airborne odor-causing chemicals are most likely to pass near them. Compounds in the beads trap and chemically transform these odor-causing chemicals into harmless, scentless compounds that remain trapped within the beads. The efficacy of the beads is easily observed as they turn from purple to brown to facilitate the chemical reaction required to deodorize your workspace. When a majority of the beads have turned brown, it is time to replace the OdorEroder®. Depending on levels of exposure, the OdorEroder® lasts up to 3 months.

OdorEroder® is effective in the following areas:

Hoods • Waste Disposal Areas • Lab Benches • Chemical Storage Cabinets • Glove Boxes • Lab Refrigerators • Other Odor-Causing Areas within a Lab

Description	Part #		
OdorEroder® - 100 g	ODER-100G		
OdorEroder® - 250 g	ODER-250G		

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SPEX CertiPrep can make custom standards to meet your exact needs. Contact us for more information.

