

Keystone Laboratories Inc. (Cannabis Act LIC-L8F3WG3Z1X)
Cannabis Method and Validation Reference Summary

Matrix	Test	Reference Method	KL Method	KL Validation	USP Specifications	EP Specifications	Equipment Used	Ver. Date
Dried Cannabis	Cannabinoids	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	2/12/2016
Dried Cannabis	Terpenes	Internal Method	SOP-4037	VA-000-4037	N/App	N/App	Agilent 5977B GCMS with Headspace	In Progress
Dried Cannabis	Arsenic	USP <561>	SOP-4038	VA-000-4038	2.0 ppm *	N/App	Agilent 7800 ICPMS	20/04/2020
Dried Cannabis	Cadmium	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	0.5 ppm *	1.0 ppm **	Agilent 7800 ICPMS	20/04/2020
Dried Cannabis	Lead	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	5.0 ppm *	5.0 ppm **	Agilent 7800 ICPMS	20/04/2020
Dried Cannabis	Mercury	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	0.2 ppm *	0.1 ppm **	Agilent 7800 ICPMS	20/04/2020
Dried Cannabis	HC 96 Pesticides	Internal Method	SOP-4036A	VA-000-4036A	Health Canada Limits	Health Canada Limits	Agilent 7010B GCTQ / Agilent 6470 LCTQ	27/05/2020
Dried Cannabis	Total Aflatoxins	Internal Method	SOP-4036A	VA-000-4036A	20 ppb	4 ppb	Agilent 6470 LCTQ	17/04/2019
Dried Cannabis	B1 Aflatoxin	Internal Method	SOP-4036A	VA-000-4036A	5 ppb	2 ppb	Agilent 6470 LCTQ	17/04/2019
Dried Cannabis	Total Aerobic Count	USP <2021> / EP 2.6.12	SOP 6005A	Plating	≤ 100,000 CFU/g	≤ 500,000 CFU/g	N/App	20/04/2019
Dried Cannabis	Total Yeast & Mold Count	USP <2021> / EP 2.6.12	SOP 6005A	Plating	≤ 1,000 CFU/g	≤ 50,000 CFU/g	N/App	20/04/2019
Dried Cannabis	BTGN Bacteria	USP <2022> / EP 2.6.31	SOP 6005D	Plating	≤ 1,000 CFU/g	≤ 10,000 CFU/g	N/App	20/04/2019
Dried Cannabis	Salmonella	USP <2022> / EP 2.6.31	SOP 6002A	Plating	Absent in 10g	Absent in 25g	N/App	20/04/2019
Dried Cannabis	P. auruginosa	USP <62> / EP 2.6.13	SOP 6002A	Plating	Absent in 1g	Absent in 1g	N/App	20/04/2019
Dried Cannabis	E. coli	USP <2022> / EP 2.6.31	SOP 6002A	Plating	Absent in 10g	Absent in 1g	N/App	20/04/2019
Dried Cannabis	S. aureus	USP <62> / EP 2.6.13	SOP 6002A	Plating and Culture	Absent in 10g	Absent in 1g	N/App	20/04/2019
Dried Cannabis	Moisture/LOD	USP <731>	SOP 6004	N/App	N/App	N/App	Balance / Drying Vacuum Oven	N/App
Dried Cannabis	Appearance	Internal Method	SOP 4002	N/App	N/App	N/App	N/App	N/App

* USP Heavy Metal Specifications: Current 43 USP <561> Table 6

** EP Heavy Metal Specifications: Current EP 9.0 Volume 1 (Implementation: 01/2017) General Monograph for Herbal Drugs, Heavy Metals (2.4.27) page 819

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Matrix	Test	Reference Method	KL Method	KL Validation	USP Specifications	EP Specifications	Equipment Used	Ver. Date
Cannabis Oil	Cannabinoids	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	2/12/2016
Cannabis Oil	Residual Solvents	Internal Method	SOP-4036B	VA-000-4036B	Health Canada Guidelines	N/App	Agilent 5977B GCMS with Headspace	In Progress
Cannabis Oil	Arsenic	USP <561>	SOP-4038	VA-000-4038	2.0 ppm *	N/App	Agilent 7800 ICPMS	20/04/2020
Cannabis Oil	Cadmium	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	0.5 ppm *	1.0 ppm **	Agilent 7800 ICPMS	20/04/2020
Cannabis Oil	Lead	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	5.0 ppm *	5.0 ppm **	Agilent 7800 ICPMS	20/04/2020
Cannabis Oil	Mercury	USP <561> / EP 2.4.27	SOP-4038	VA-000-4038	0.2 ppm *	0.1 ppm **	Agilent 7800 ICPMS	20/04/2020
Cannabis Oil	HC 96 Pesticides	In Progress	In Progress	In Progress	Health Canada Limits	Health Canada Limits	Agilent 7010B GCTQ / Agilent 6470 LCTQ	In Progress
Cannabis Oil	Total Aflatoxins	In Progress	In Progress	In Progress	20 ppb	4 ppb	Agilent 6470 LCTQ	In Progress
Cannabis Oil	B1 Aflatoxin	In Progress	In Progress	In Progress	5 ppb	2 ppb	Agilent 6470 LCTQ	In Progress
Cannabis Oil	Total Aerobic Count	EP 2.6.12	SOP 6005A	Plating	N/App	≤ 500,000 CFU/g	N/App	20/04/2019
Cannabis Oil	Total Yeast & Mold Count	EP 2.6.12	SOP 6005A	Plating	N/App	≤ 50,000 CFU/g	N/App	20/04/2019
Cannabis Oil	BTGN Bacteria	EP 2.6.31	SOP 6005D	Plating	N/App	≤ 10,000 CFU/g	N/App	20/04/2019
Cannabis Oil	Salmonella	EP 2.6.31	SOP 6002A	Plating	N/App	Absent in 25g	N/App	20/04/2019
Cannabis Oil	P. auruginosa	EP 2.6.13	SOP 6002A	Plating	N/App	Absent in 1g	N/App	20/04/2019
Cannabis Oil	E. coli	EP 2.6.31	SOP 6002A	Plating	N/App	Absent in 1g	N/App	20/04/2019
Cannabis Oil	S. aureus	EP 2.6.13	SOP 6002A	Plating	N/App	Absent in 1g	N/App	20/04/2019
Cannabis Oil	Total Aerobic Count	USP <2021>	SOP 6005A	Plating	≤ 100,000 CFU/g	N/App	N/App	In Progress
Cannabis Oil	Total Yeast & Mold Count	USP <2021>	SOP 6005A	Plating	≤ 1,000 CFU/g	N/App	N/App	In Progress
Cannabis Oil	BTGN Bacteria	USP <2022>	SOP 6005D	Plating	≤ 1,000 CFU/g	N/App	N/App	In Progress
Cannabis Oil	Salmonella	USP <2022>	SOP 6002A	Plating	Absent in 10g	N/App	N/App	In Progress
Cannabis Oil	P. auruginosa	USP <62>	SOP 6002A	Plating	Absent in 1g	N/App	N/App	In Progress
Cannabis Oil	E. coli	USP <2022>	SOP 6002A	Plating	Absent in 10g	N/App	N/App	In Progress
Cannabis Oil	S. aureus	USP <62>	SOP 6002A	Plating	Absent in 10g	N/App	N/App	In Progress
Cannabis Oil	Appearance	Internal Method	SOP 4002		N/App	N/App	N/App	N/App
Chocolate	THC/CBD	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	In Progress
Beverage	CBD	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	In Progress
Beverage	THC/CBD	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	In Progress
Gummy	THC/CBD	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	In Progress
Sugar	THC/CBD	Internal Method	SOP-4033	VA-000-4033	N/App	N/App	Agilent 1100 HPLC w/UVD	In Progress

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