

Hemp Proficiency Testing

Summary Statistics

HM21SEP-2 (hemp)



Sample: HM21SEP-2 (hemp)

Summary Statistics

Issue Date: October 24, 2021

By Analyte

Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001	0.2987	51	0.0265	8.87	4.78	3.21	0	15.6
Δ9-THCA (%AR)	002	0.1078	52	0.0148	13.7	5.57	4.33	0	16.9
CBD (%AR)	003	5.2296	41	0.4472	8.55	3.11	2.5	0.02	9.04
CBDA (%AR)	004	6.7162	39	0.6383	9.5	3	2.9	0.02	8.8
CBN (%AR)	005	0.0267	23	0.0077	29.1	6.87	9.4	0	66.9
Total Δ9-THC (%AR)	006	0.3986	59	0.0425	10.7	4.58	3.42	0.43	12.7
Total CBD (%AR)	007	11.1278	42	1.0154	9.13	2.78	2.73	0.02	11.9
CBDV (%AR)	008	0.0388	9	0.0173	44.5	6.5	5.91	0	18
CBDVA (%AR)	009	0.0707	7	0.023	32.6	5.94	4.6	0	31
CBG (%AR)	010	0.1425	22	0.0398	28	5.35	5.07	0	19.3
CBGA (%AR)	011	0.2388	19	0.0424	17.8	4.95	4.63	0.57	15.3
CBC (%AR)	014	0.3193	21	0.0233	7.3	4.74	3.32	0.27	8.33
Cd (ug/g AR)	101	0.163	9	0.0218	13.4	20.85	5.05	1.94	11.2

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As (ug/g AR)	102	0.0649	6	0.0141	21.8	23.95	12.73	1.74	29.8
Pb (ug/g AR)	104	0.3205	10	0.0466	14.5	18.84	8.96	3.01	17.9
(-)-alpha-Bisabolol (	201	0.0842	7	0.072	85.4	5.78	7.58	2.27	15.3
beta-Caryophyllene (	202	0.1063	7	0.0315	29.7	5.59	6.04	0.91	12.7
alpha-Humulene (%)	205	0.0368	6	0.0127	34.6	6.55	4.95	0.17	11.4
Moisture (%AR)	500	7.2386	24	1.862	25.7	2.97	3.45	0	13.6
Δ9-THC (%DW)	501	0.3235	22	0.031	9.6	4.73	2.77	0.43	11
Δ9-THCA (%DW)	502	0.1165	20	0.0159	13.7	5.51	4.65	0.51	11.7
CBD (%DW)	503	5.447	19	0.7004	12.9	3.09	2.6	0.36	10.5
CBDA (%DW)	504	7.1699	18	0.8559	11.9	2.97	3.42	0.26	10.4
CBN (%DW)	505	0.0293	13	0.0106	36.3	6.78	5.48	0	20.7
Total Δ9-THC (%DW)	506	0.4257	25	0.0363	8.53	4.54	2.85	0.48	9.75
Total CBD (%DW)	507	11.784	19	1.365	11.6	2.76	3.12	0.33	11.9
CBG (%DW)	510	0.157	10	0.016	10.2	5.27	5.61	0.47	12.2
CBGA (%DW)	511	0.2717	9	0.0383	14.1	4.85	4.77	0.57	15.3
CBC (%DW)	514	0.3357	10	0.0385	11.5	4.7	3.54	0.42	8.83

By Method Group									
Analyte	Code	Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
		Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
CBN (%AR)	LC	0.0238	18	0.003	12.5	6.99	8.18	0	66.9
Total Δ9-THC (%AR)	GC	0.4091	11	0.0866	21.2	4.56	3.52	0.75	8.69
Total Δ9-THC (%AR)	LC	0.3937	43	0.0376	9.54	4.59	3.37	0.43	12.7

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Total CBD (%AR)	GC		10.5217	6	2.1178	20.1	2.8	3.65	1.33	11.9
Total CBD (%AR)	LC		11.1881	32	0.7286	6.51	2.78	2.6	0.02	8.58
CBN (%DW)	LC		0.027	12	0.0073	27.2	6.86	5.12	0	20.7
Total Δ9-THC (%DW)	LC		0.4299	21	0.0402	9.36	4.53	2.73	0.48	9.75
Total CBD (%DW)	LC		11.9092	16	1.2522	10.5	2.75	2.85	0.33	10.5

By Method										
Analyte	Code		Trueness (Lab Value)				Horwitz %RSD	Precision (Lab RSDr)		
			Rob Mean	n	Rob StDev	%RSD		Rob Mean	min	max
Δ9-THC (%AR)	001.02	AOAC 2018.11, UV	0.2899	7	0.02	6.91	4.81	2.98	1.11	4.19
Δ9-THC (%AR)	001.10	Other LC-UV	0.2997	31	0.0244	8.15	4.78	2.79	0.46	15.6
Δ9-THCA (%AR)	002.02	AOAC 2018.11, UV	0.1077	8	0.0156	14.5	5.57	3.15	0	13.2
Δ9-THCA (%AR)	002.10	Other LC-UV	0.1065	32	0.0153	14.4	5.58	4.72	0	16.9
CBD (%AR)	003.02	AOAC 2018.11, UV	5.13	6	0.2972	5.79	3.12	2.88	0.72	4.92
CBD (%AR)	003.10	Other LC-UV	5.3309	27	0.4404	8.26	3.1	2.5	0.4	9.04
CBDA (%AR)	004.02	AOAC 2018.11, UV	6.571	6	0.4477	6.81	3.01	3.57	1.42	6.74
CBDA (%AR)	004.10	Other LC-UV	6.8188	26	0.6246	9.16	2.99	2.8	0.26	8.8
CBN (%AR)	005.10	Other LC-UV	0.0261	13	0.0055	21	6.9	8.16	0.23	23.4
Total Δ9-THC (%AR)	006.02	AOAC 2018.11, UV	0.384	7	0.0317	8.26	4.61	3.1	1.56	6.25
Total Δ9-THC (%AR)	006.10	Other LC-UV	0.395	27	0.0367	9.28	4.59	3.1	0.48	12.7
Total Δ9-THC (%AR)	006.40	GC-FID	0.4091	11	0.0866	21.2	4.56	3.52	0.75	8.69
Total CBD (%AR)	007.02	AOAC 2018.11, UV	10.4455	6	1.3502	12.9	2.81	3.05	1.17	5.62
Total CBD (%AR)	007.10	Other LC-UV	11.3771	22	0.6617	5.82	2.77	2.6	0.31	8.58

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Total CBD (%AR)	007.40	GC-FID	10.5217	6	2.1178	20.1	2.8	3.65	1.33	11.9
CBDV (%AR)	008.99	Other	0.0405	8	0.0193	47.6	6.45	7.02	1.76	18
CBG (%AR)	010.99	Other	0.1413	19	0.0414	29.3	5.35	5.44	0.7	19.3
CBGA (%AR)	011.99	Other	0.2402	16	0.0471	19.6	4.94	5.11	0.57	15.3
CBC (%AR)	014.99	Other	0.3184	18	0.0224	7.04	4.74	3.35	0.27	8.33
Cd (ug/g AR)	101.04	ICP-MS	0.163	9	0.0218	13.4	20.85	5.05	1.94	11.2
As (ug/g AR)	102.04	ICP-MS	0.0649	6	0.0141	21.8	23.95	12.73	1.74	29.8
Pb (ug/g AR)	104.04	ICP-MS	0.3205	10	0.0466	14.5	18.84	8.96	3.01	17.9
(-)-alpha-Bisabolol (	201.02	GC,MS	0.0842	7	0.072	85.4	5.78	7.58	2.27	15.3
beta-Caryophyllene (	202.02	GC,MS	0.1063	7	0.0315	29.7	5.59	6.04	0.91	12.7
alpha-Humulene (%)	205.02	GC,MS	0.0368	6	0.0127	34.6	6.55	4.95	0.17	11.4
Moisture (%AR)	500.70	Commerc. Anal.	7.0591	13	1.8884	26.8	2.98	4.07	0	13.1
Moisture (%AR)	500.99	Other	6.891	6	1.7212	25	2.99	3.15	0.39	13.6
Δ9-THC (%DW)	501.10	Other LC-UV	0.3295	14	0.033	10	4.71	2.54	0.43	9.54
Δ9-THCA (%DW)	502.10	Other LC-UV	0.117	14	0.0153	13	5.51	4.35	0.51	11.3
CBD (%DW)	503.10	Other LC-UV	5.5183	13	0.8213	14.9	3.09	2.84	0.36	10.5
CBDA (%DW)	504.10	Other LC-UV	7.2196	13	0.9772	13.5	2.97	3.96	0.26	10.4
CBN (%DW)	505.10	Other LC-UV	0.0306	9	0.011	35.9	6.73	3.79	0.23	18.2
Total Δ9-THC (%DW)	506.10	Other LC-UV	0.4346	16	0.0472	10.9	4.52	2.61	0.48	9.32
Total CBD (%DW)	507.10	Other LC-UV	11.9926	13	1.379	11.5	2.75	3.25	0.33	10.5
CBG (%DW)	510.99	Other	0.1584	9	0.0167	10.5	5.26	5.97	0.47	12.2
CBGA (%DW)	511.99	Other	0.2793	8	0.0306	10.9	4.83	4.32	0.57	15.3
CBC (%DW)	514.99	Other	0.3374	9	0.0403	12	4.7	3.91	0.42	8.83

1. Data summarized for trueness and precision if 6 or more Lab values and 6 or more Lab RSDr values were available.
2. AR refers to concentration on as-received basis. DW refers to concentration on dry weight basis.