

Hemp Proficiency Testing

Summary Statistics

HM21NOV-1 (hemp)



Sample: HM21NOV-1 (hemp)

Summary Statistics

Issue Date: December 20, 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	0.1962	52	0.0225	11.5	5.09	3.28	0.35	22.5
Δ9-THCA (%AR)	002	0.0733	47	0.0159	21.7	5.91	5.43	0	37.3
CBD (%AR)	003	3.421	43	0.3263	9.54	3.32	3.12	0.23	10.1
CBDA (%AR)	004	5.0545	41	0.4351	8.61	3.13	2.89	0.35	9.96
CBN (%AR)	005	0.0174	23	0.0064	36.4	7.33	6.6	0.43	16
Total Δ9-THC (%AR)	006	0.2661	60	0.0418	15.7	4.87	3.34	0	23.1
Total CBD (%AR)	007	7.9354	46	0.5444	6.86	2.92	2.68	0.05	10.9
CBDV (%AR)	008	0.0364	12	0.0149	41	6.56	8.16	2.36	34.6
CBG (%AR)	010	0.1294	24	0.0309	23.9	5.42	4.52	0.64	10.1
CBGA (%AR)	011	0.2366	23	0.0275	11.6	4.95	4.78	0.37	17.6
CBC (%AR)	014	0.2403	23	0.0177	7.35	4.94	3.25	0.35	11.7
Cd (ug/g AR)	101	0.15	7	0.0192	12.8	21.12	3.66	0.53	8.59
Pb (ug/g AR)	104	0.2073	9	0.0213	10.3	20.12	4.51	0.04	14.2

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(-)-alpha-Bisabolol (	201	0.0551	7	0.0347	63	6.16	6.91	1.94	16.1
beta-Caryophyllene (	202	0.0736	7	0.0112	15.2	5.9	7.07	2.84	26.8
alpha-Humulene (%)	205	0.0264	6	0.0043	16.1	6.88	9.43	6.01	26.8
Moisture (%AR)	500	6.5236	25	1.9224	29.5	3.01	3.92	0	21.7
Δ9-THC (%DW)	501	0.2128	23	0.0284	13.4	5.03	3.23	0.36	11.2
Δ9-THCA (%DW)	502	0.0794	23	0.0173	21.7	5.84	4.95	0.31	13.1
CBD (%DW)	503	3.5164	22	0.3633	10.3	3.3	3.93	0.39	10.4
CBDA (%DW)	504	5.4051	21	0.7655	14.2	3.1	3.35	0.39	10.2
CBN (%DW)	505	0.0163	13	0.0031	19.2	7.4	6.49	0.42	13.3
Total Δ9-THC (%DW)	506	0.2758	26	0.0433	15.7	4.84	3.14	0	11.5
Total CBD (%DW)	507	8.3644	22	1.0746	12.8	2.9	3.56	0.39	11
CBDV (%DW)	508	0.0502	7	0.0397	79	6.25	7.2	2.25	14
CBG (%DW)	510	0.1321	13	0.0192	14.6	5.41	4.62	0.65	8.54
CBGA (%DW)	511	0.2574	12	0.019	7.4	4.89	5.21	0.35	28.7
CBC (%DW)	514	0.2536	11	0.0211	8.31	4.9	4.23	0.35	11.9

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	0.0158	18	0.0045	28.4	7.44	6.81	0.43	16
Total Δ9-THC (%AR)	GC	0.2861	11	0.0499	17.4	4.81	3.09	0.35	19
Total Δ9-THC (%AR)	LC	0.2573	43	0.041	15.9	4.89	3.41	0.48	23.1
Total CBD (%AR)	GC	8.4533	6	1.504	17.8	2.9	1.85	0.95	10.9

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Total CBD (%AR)	LC		7.8899	35	0.4533	5.74	2.93	2.78	0.05	10
CBN (%DW)	LC		0.0163	13	0.0031	19.2	7.4	6.49	0.42	13.3
Total Δ9-THC (%DW)	LC		0.2764	22	0.0485	17.5	4.84	3.27	0.73	11.5
Total CBD (%DW)	LC		8.4275	19	0.964	11.4	2.9	3.49	0.39	10.3

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	0.1954	6	0.0381	19.5	5.1	6.4	1.63	11.9
Δ9-THC (%AR)	001.10	Other LC-UV	0.1901	32	0.0198	10.4	5.12	3.05	0.35	22.5
Δ9-THCA (%AR)	002.10	Other LC-UV	0.069	29	0.0148	21.4	5.96	5.77	0	37.3
CBD (%AR)	003.10	Other LC-UV	3.4847	28	0.2905	8.34	3.31	2.8	0.23	10.1
CBDA (%AR)	004.02	AOAC 2018.11, UV	5.2244	6	0.701	13.4	3.11	3.58	1.31	9.19
CBDA (%AR)	004.10	Other LC-UV	5.0028	27	0.3893	7.78	3.13	2.77	0.39	9.96
CBN (%AR)	005.10	Other LC-UV	0.0158	14	0.0037	23.3	7.43	5.87	0.43	14.1
Total Δ9-THC (%AR)	006.02	AOAC 2018.11, UV	0.2718	7	0.0533	19.6	4.85	5.91	1.1	11.4
Total Δ9-THC (%AR)	006.10	Other LC-UV	0.2461	27	0.0408	16.6	4.92	3.27	0.76	23.1
Total Δ9-THC (%AR)	006.40	GC-FID	0.2861	11	0.0499	17.4	4.81	3.09	0.35	19
Total CBD (%AR)	007.02	AOAC 2018.11, UV	8.1332	7	0.5033	6.19	2.91	3.37	1.05	9.07
Total CBD (%AR)	007.10	Other LC-UV	7.8383	24	0.4482	5.72	2.93	2.79	0.39	10
Total CBD (%AR)	007.40	GC-FID	8.4533	6	1.504	17.8	2.9	1.85	0.95	10.9
CBDV (%AR)	008.99	Other	0.0364	12	0.0149	41	6.56	8.16	2.36	34.6
CBG (%AR)	010.99	Other	0.1315	22	0.0324	24.7	5.41	4.64	0.64	10.1

CBGA (%AR)	011.99	Other	0.2386	21	0.028	11.8	4.95	4.47	0.37	17.6
CBC (%AR)	014.99	Other	0.2397	21	0.0155	6.47	4.94	3.02	0.35	11.7
Cd (ug/g AR)	101.04	ICP-MS	0.15	7	0.0192	12.8	21.12	3.66	0.53	8.59
Pb (ug/g AR)	104.04	ICP-MS	0.2073	9	0.0213	10.3	20.12	4.51	0.04	14.2
(-)-alpha-Bisabolol (	201.02	GC,MS	0.0551	7	0.0347	63	6.16	6.91	1.94	16.1
beta-Caryophyllene (	202.02	GC,MS	0.0736	7	0.0112	15.2	5.9	7.07	2.84	26.8
alpha-Humulene (%)	205.02	GC,MS	0.0264	6	0.0043	16.1	6.88	9.43	6.01	26.8
Moisture (%AR)	500.70	Commerc. Anal.	6.5407	12	2.3544	36	3.01	4.08	0	11.1
Moisture (%AR)	500.99	Other	5.9939	8	1.972	32.9	3.05	4.41	0	21.7
Δ9-THC (%DW)	501.10	Other LC-UV	0.2107	12	0.0338	16	5.04	3.41	0.36	11.2
Δ9-THCA (%DW)	502.10	Other LC-UV	0.0766	12	0.0143	18.7	5.87	5.03	0.36	13.1
CBD (%DW)	503.10	Other LC-UV	3.5513	12	0.4534	12.8	3.3	3.28	0.39	10.4
CBDA (%DW)	504.10	Other LC-UV	5.254	12	0.7508	14.3	3.11	3.58	0.39	10.2
CBN (%DW)	505.10	Other LC-UV	0.0168	9	0.0032	18.8	7.37	6.04	0.42	13.3
Total Δ9-THC (%DW)	506.10	Other LC-UV	0.2692	14	0.0506	18.8	4.86	3.4	0.73	11.5
Total CBD (%DW)	507.10	Other LC-UV	8.3465	13	1.1255	13.5	2.9	3.53	0.39	10.3
CBDV (%DW)	508.99	Other	0.0534	6	0.0422	79	6.19	7.86	2.25	14
CBG (%DW)	510.99	Other	0.133	11	0.0223	16.8	5.4	4.92	0.65	8.54
CBGA (%DW)	511.99	Other	0.2619	10	0.0135	5.16	4.88	4.8	0.35	28.7
CBC (%DW)	514.99	Other	0.2556	10	0.0216	8.46	4.9	4.28	0.35	11.9

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.