

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 1 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	

Mycotoxins

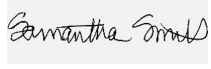
Test ID: T000261010


Methods: TM18 (UHPLC-QQQ)

LCMS/MS: Mycotoxins

	Dynamic Range (ppb)	Result (ppb)	Notes
Ochratoxin A	2.06 - 128.71	ND	N/A
Aflatoxin B1	0.90 - 33.72	ND	
Aflatoxin B2	2.22 - 33.40	ND	
Aflatoxin G1	0.96 - 33.46	ND	
Aflatoxin G2	1.16 - 33.56	ND	
Total Aflatoxins (B1, B2, G1, and G2)		ND	

Final Approval


PREPARED BY / DATE
Sam Smith
08Nov2023
10:06:00 AM MST


APPROVED BY / DATE
Karen Winternheimer
08Nov2023
10:19:00 AM MST

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 2 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	


Residual Solvents


Test ID: T000261009

Methods: TM04 (GC-MS): Residual

Solvents	Dynamic Range (ppm)	Result (ppm)	Notes
Propane	82 - 1641	ND	
Butanes (Isobutane, n-Butane)	157 - 3149	ND	
Methanol	60 - 1202	ND	
Pentane	89 - 1775	ND	
Ethanol	95 - 1894	733	
Acetone	96 - 1916	ND	
Isopropyl Alcohol	104 - 2079	ND	
Hexane	6 - 117	ND	
Ethyl Acetate	97 - 1941	ND	
Benzene	0.2 - 3.9	ND	
Heptanes	94 - 1871	ND	
Toluene	18 - 353	ND	
Xylenes (m,p,o-Xylenes)	128 - 2565	ND	

Final Approval


 Karen Winternheimer
 09Nov2023
 01:52:00 PM MST
 PREPARED BY / DATE


 Sam Smith
 09Nov2023
 01:59:00 PM MST
 APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr

Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 3 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	


Cannabinoids


Test ID: T000261005

Methods: TM14 (HPLC-DAD)

	LOD (mg)	LOQ (mg)	Result (mg)	Result (mg/g)	Notes
Cannabichromene (CBC)	0.146	0.503	ND	ND	# of Servings = 1, Sample Weight=355g
Cannabichromenic Acid (CBCA)	0.133	0.460	ND	ND	
Cannabidiol (CBD)	0.503	1.324	ND	ND	
Cannabidiolic Acid (CBDA)	0.516	1.358	ND	ND	
Cannabidivarin (CBDV)	0.119	0.313	ND	ND	
Cannabidivarinic Acid (CBDVA)	0.215	0.567	ND	ND	
Cannabigerol (CBG)	0.083	0.286	<LOQ	<LOQ	
Cannabigerolic Acid (CBGA)	0.346	1.195	ND	ND	
Cannabinol (CBN)	0.108	0.373	ND	ND	
Cannabinolic Acid (CBNA)	0.236	0.815	ND	ND	
Delta 8-Tetrahydrocannabinol (Delta 8-THC)	0.412	1.423	ND	ND	
Delta 9-Tetrahydrocannabinol (Delta 9-THC)	0.374	1.293	5.250	0.00	
Delta 9-Tetrahydrocannabinolic Acid (THCA-A)	0.331	1.145	ND	ND	
Tetrahydrocannabivarin (THCV)	0.075	0.260	ND	ND	
Tetrahydrocannabivarinic Acid (THCVA)	0.292	1.010	ND	ND	
Total Cannabinoids			5.250	0.00	
Total Potential THC			5.250	0.00	
Total Potential CBD			ND	ND	

Final Approval


 Karen Winternheimer
 09Nov2023
 09:14:00 AM MST
 PREPARED BY / DATE


 Sam Smith
 09Nov2023
 09:16:00 AM MST
 APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 4 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	

Microbial Contaminants

Test ID: T000261007

Methods: TM25 (PCR) TM24, TM26, TM27 (Culture Plating)

	Method	LOD	Quantitation Range	Result	Notes
STEC	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	Free from visual mold, mildew, and foreign matter
<i>Salmonella</i>	TM25: PCR	10 ⁰ CFU/25g	NA	Absent	
Total Yeast and Mold*	TM24: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	
Total Aerobic Count*	TM26: Culture Plating	10 ² CFU/g	1.0x10 ³ - 1.5x10 ⁵	None Detected	
Total Coliforms*	TM27: Culture Plating	10 ¹ CFU/g	1.0x10 ² - 1.5x10 ⁴	None Detected	

Final Approval

 Eden Thompson-Wright 09Nov2023 10:50:00 AM MST PREPARED BY / DATE	 Brianne Maillot 09Nov2023 11:33:00 AM MST APPROVED BY / DATE
--	--

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 5 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	


Pesticides


Test ID: T000261006

Methods: TM17

(LC-QQ LC MS/MS)	Dynamic Range (ppb)	Result (ppb)		Dynamic Range (ppb)	Result (ppb)	
Abamectin	331 - 2667	ND		Malathion	286 - 2685	ND
Acephate	40 - 2783	ND		Metalaxyl	43 - 2718	ND
Acetamiprid	42 - 2733	ND		Methiocarb	45 - 2694	ND
Azoxystrobin	45 - 2699	ND		Methomyl	41 - 2768	ND
Bifenazate	42 - 2750	ND		MGK 264 1	166 - 1591	ND
Boscalid	40 - 2737	ND		MGK 264 2	104 - 1084	ND
Carbaryl	39 - 2640	ND		Myclobutanil	54 - 2688	ND
Carbofuran	44 - 2678	ND		Naled	44 - 2649	ND
Chlorantraniliprole	43 - 2698	ND		Oxamyl	41 - 2793	ND
Chlorpyrifos	43 - 2706	ND		Paclobutrazol	43 - 2664	ND
Clofentezine	288 - 2730	ND		Permethrin	284 - 2791	ND
Diazinon	284 - 2678	ND		Phosmet	41 - 2577	ND
Dichlorvos	290 - 2795	ND		Prophos	301 - 2715	ND
Dimethoate	43 - 2719	ND		Propoxur	42 - 2685	ND
E-Fenpyroximate	284 - 2746	ND		Pyridaben	289 - 2780	ND
Etofenprox	47 - 2720	ND		Spinosad A	31 - 2077	ND
Etoxazole	288 - 2626	ND		Spinosad D	64 - 671	ND
Fenoxycarb	46 - 2652	ND		Spiromesifen	278 - 2762	ND
Fipronil	49 - 2780	ND		Spirotetramat	277 - 2736	ND
Flonicamid	46 - 2805	ND		Spiroxamine 1	16 - 1010	ND
Fludioxonil	301 - 2732	ND		Spiroxamine 2	26 - 1601	ND
Hexythiazox	43 - 2781	ND		Tebuconazole	288 - 2801	ND
Imazalil	267 - 2711	ND		Thiacloprid	44 - 2769	ND
Imidacloprid	50 - 2788	ND		Thiamethoxam	43 - 2808	ND
Kresoxim-methyl	49 - 2705	ND		Trifloxystrobin	44 - 2705	ND

Final Approval


Karen Winternheimer
10Nov2023
09:29:00 AM MST
PREPARED BY / DATE


Sam Smith
10Nov2023
09:32:00 AM MST
APPROVED BY / DATE

Prepared for:

Surly Brewing Co

4811 Dusharme Dr
Brooklyn Center, MN USA 55429

Cheech & Chong High Ball Raspberry

Batch ID or Lot Number: MT001 Best By: 5/2/25	Test, Test ID and Methods: Various	Matrix: Finished Product	Page 6 of 6
Reported: 08Nov2023	Started: 06Nov2023	Received: 06Nov2023	


Heavy Metals

Test ID: T000261008


Methods: TM19 (ICP-MS): Heavy

Metals	Dynamic Range (ppm)	Result (ppm)	Notes
Arsenic	0.04 - 4.08	ND	
Cadmium	0.05 - 4.55	ND	
Mercury	0.05 - 4.55	ND	
Lead	0.05 - 4.55	ND	

Final Approval


Samantha Simms
10Nov2023
10:21:00 AM MST

PREPARED BY / DATE


Karen Winternheimer
10Nov2023
10:26:00 AM MST

APPROVED BY / DATE



<https://results.botanacor.com/api/v1/coas/uuid/ac6d994e-4669-4e5f-a7c3-3ed5398ce66c>

Definitions

LOD = Limit of Detection, ULOQ = Upper Limit of Quantitation, LLOQ = Lower Limit of Quantitation, PPB = Parts per Billion, % = % (w/w) = Percent (weight of analyte / weight of product). ND = None Detected (defined by dynamic range of the method). Total Potential Delta 9-THC or CBD is calculated to take into account the loss of a carboxyl group during decarboxylation step, using the following formulas: Total Potential Delta 9-THC = Delta 9-THC + (Delta 9-THCa * (0.877)) and Total CBD = CBD + (CBDa * (0.877)). Fail equates to a concentration level of Delta 9-THC, on a dry weight basis, higher than 0.3 percent + or - the measurement uncertainty. Total Potential THC is calculated using the following formulas to take into account the loss of a carboxyl group during decarboxylation step. Total THC = THC + (THCa * (0.877)). ALOQ = Above Limit Of Quantitation (defined by dynamic range of the method), CFU/g = Colony Forming Units per Gram. Values recorded in scientific notation, a common microbial practice of expressing numbers that are too large to be conveniently written in decimal form. Examples: 10² = 100 CFU, 10³ = 1,000 CFU, 10⁴ = 10,000 CFU, 10⁵ = 100,000 CFU.

Testing results are based solely upon the sample submitted to SC Laboratories, Inc., in the condition it was received. SC Laboratories, Inc., warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices using validated methods. Data was generated using an unbroken chain of comparison to NIST traceable Reference Standards and Certified Reference Materials. This report may not be reproduced, except in full, without the written approval of SC Laboratories, Inc. ISO/IEC 17025:2017 A2LA Cert #: 4329.02 Chemical; 4329.03 Biological. Some tests listed on this COA may not be within our scope of A2LA accreditation. Please visit [A2LA for more details](#).



Cert #4329.02
ac6d994e46694e5fa7c33ed5398ce66c.1