

2554 Palumbo Dr. Lexington, KY 40509

**Customer:** Rational Hemp

COA Released: 03/29/2020

PO Box 2474

East Hampton NY, 11937

Sample Num:

Order Num:

Sample Name: 80mg/mL CBD in OHSO

External Sample ID:

Collected Date: Batch Number: 2007611.80

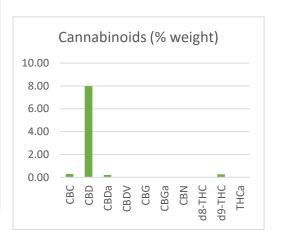
Received Date: 03/25/2020 Product Type:

Sample Type: OHSO

Comments:

#### **CANNABINOID PROFILE**

Analyte	LOQ (%)	% weight	(mg/g)
CBC	0.01	0.29	2.87
CBD	0.01	7.98	79.75
CBDa	0.01	0.21	2.08
CBDV	0.01	ND	ND
CBG	0.01	ND	ND
CBGa	0.01	ND	ND
CBN	0.01	0.03	0.25
d8-THC	0.01	ND	ND
d9-THC	0.01	0.26	2.64
THCa	0.01	ND	ND
Total Cannabinoids		<b>8.76</b> %	6 <b>87.59</b> mg/g
Total Potential THC		<b>0.26</b> %	6 <b>2.64</b> mg/g
Total Potential CBD		<b>8.16</b> %	81.57 mg/g



3/29/2020 APPROVED BY DATE

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<sup>\*</sup>Total Cannabinoids refers to the sum of all cannabinoids detected.

<sup>\*</sup>Total Potential CBD = (0.877 x CBDa) + CBD. \*Total Potential THC = (0.877 x THCa) + THC. \*Total Potential CBG = (0.878 x CBGa) + CBG.

<sup>\*</sup>Total Potential THC/CBD are calculated to take into account the loss of an acid group during decarboxylation.



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Collected Date:

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# **Residual Solvents**

ANALYTF	LOQ	Result
ANALITE	ug/g	ug/g
Methanol	250	<loq< td=""></loq<>
Methylbutane	350	<loq< td=""></loq<>
Ethanol	350	713
n-Pentane	350	<loq< td=""></loq<>
Ether	350	<loq< td=""></loq<>
Acetone	350	<loq< td=""></loq<>
2-Propanol	350	<loq< td=""></loq<>
Acetonitrile	123	<loq< td=""></loq<>
Methylene Chloride	90	<loq< td=""></loq<>
2-Methylpentane	87	<loq< td=""></loq<>
3-Methylpentane	87	<loq< td=""></loq<>
n-Hexane	87	<loq< td=""></loq<>
Ethyl Acetate	175	<loq< td=""></loq<>
2-Butanol	175	<loq< td=""></loq<>
Tetrahydrofuran	54	<loq< td=""></loq<>
Cyclohexane	146	<loq< td=""></loq<>
Isopropyl Acetate	175	<loq< td=""></loq<>
n-Heptane	350	<loq< td=""></loq<>
1,4 Dioxane	29	<loq< td=""></loq<>
2-Ethoxyethanol	24	<loq< td=""></loq<>
Toluene	67	<loq< td=""></loq<>
Ethylbenzene	81	<loq< td=""></loq<>
m+p-Xylene	163	<loq< td=""></loq<>
o-Xylene	81	<loq< td=""></loq<>

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### **Terpenes**

ANALYTE	LOQ	Result
ANALTIE	wt%	wt%
alpha-Pinene	0.01	<loq< td=""></loq<>
Camphene	0.01	<loq< td=""></loq<>
beta-Myrcene	0.01	<loq< td=""></loq<>
beta-Pinene	0.01	<loq< td=""></loq<>
delta-3-carene	0.01	<loq< td=""></loq<>
alpha-Terpinene	0.01	<loq< td=""></loq<>
trans-beta-Ocimene	0.01	<loq< td=""></loq<>
d-Limonene	0.01	<loq< td=""></loq<>
p-Isopropyltoluene (p-Cymene)	0.01	<loq< td=""></loq<>
Ocimene (mixture of isomers)	0.01	<loq< td=""></loq<>
Eucalyptol	0.01	<loq< td=""></loq<>
gamma-Terpinene	0.01	<loq< td=""></loq<>
Terpinolene	0.01	<loq< td=""></loq<>
Linalool	0.01	<loq< td=""></loq<>
Isopulegol	0.01	<loq< td=""></loq<>
Geraniol	0.01	<loq< td=""></loq<>
beta-Caryophyllene	0.01	0.05
alpha-Humulene	0.01	0.02
cis-Nerolidol	0.01	<loq< td=""></loq<>
trans-Nerolidol	0.01	<loq< td=""></loq<>
Guaiol	0.01	<loq< td=""></loq<>
alpha-Bisabolol	0.01	0.02

Shelly Drinnan

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#### **HEAVY METALS**

Analyte	LOQ	Result	Units
Arsenic	0.5	<loq< td=""><td>ppm</td></loq<>	ppm
Cadmium	0.5	<loq< td=""><td>ppm</td></loq<>	ppm
Lead	0.5	<loq< td=""><td>ppm</td></loq<>	ppm
Mercury	3.0	<loq< td=""><td>ppm</td></loq<>	ppm

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#### **Certificate of Analysis**

Customer: Sample ID:

Rational Hemp Genetic Variety: 80 mg/mL CBD in OHSO

PO Box 2474 Sample Type: Concentrate East Hampton, NY 11937 Batch ID: 2007611.8

Collected Date:

Received Date 3/25/2020 COA Released: 4/1/2020

MICROBIALS				
Parameter	Result			
STEC (E. coli)	Negative			
Salmonella	Negative			
Listeria spp.	Negative			
L. monocytogenes	Negative			
Yeast/Mold	0 CFU*			

*CFU = Colony	Forming	Unit(s)	per	gram
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WATER ACTIVITY				
Temperature	Result			
25	0.3			

MOISTURE					
Moisture %	3.92%				

Brittany Danl

4/1/2020

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#### **MYCOTOXINS**

ANALYTE	LOQ	Result	
ANALITE	ppm	ppm	
Aflatoxin-G2	0.010	ND	
Aflatoxin-G1	0.010	ND	
Aflatoxin-B2	0.010	ND	
Aflatoxin-B1	0.010	ND	
Ochratoxin-A	0.010	ND	

**ND** - Analyte is less than the limit of detection

<LOQ - Analyte is above the limit of detection but less than the limit of quantification

Shelly Dunnan

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#### **PESTICIDES**

ANALYTE	LOQ	Result	ANALYTE	LOQ	Result	ANALYTE	LOQ	Result
ANALTIE	ppm	ppm	ANALTIE	ppm	ppm	ANALTIE	ppm	ppm
Daminozide	0.050	ND	Chlorantraniliprole	0.050	ND	Clofentezine	0.050	ND
Acephate	0.050	ND	Spiroxamine-1	0.050	ND	Trifloxystrobin	0.050	ND
Oxamyl	0.050	ND	Azoxystrobin	0.050	ND	Prallethrin	0.050	ND
Methomyl	0.050	ND	Phosmet	0.050	ND	Piperonyl Butoxide	0.050	ND
Thiamethoxam	0.050	ND	Methiocarb	0.050	ND	Chlorpyrifos	0.050	ND
Imidacloprid	0.050	ND	Malathion	0.050	ND	Hexythiazox	0.050	ND
Dimethoate	0.050	ND	Myclobutanil	0.050	ND	Etoxazole	0.050	ND
Acetamiprid	0.050	ND	Paclobutrazol	0.050	ND	Spiromesifen	0.050	ND
Thiacloprid	0.050	ND	Bifenazate	0.050	ND	Pyrethrin I	0.050	ND
Aldicarb	0.050	ND	Spirotetramat	0.050	ND	Fenpyroximate	0.050	ND
Dichlorvos	0.050	ND	Fenoxycarb	0.050	ND	Pyridaben	0.050	ND
Carbofuran	0.050	ND	Ethoprophos	0.050	ND	Permethrins	0.050	ND
Propoxur	0.050	ND	Tebuconazole	0.050	ND	AbamectinB1a	0.050	ND
Carbaryl	0.050	ND	Kresoxym-methyl	0.050	ND	Etofenprox	0.050	ND
Imazalil	0.050	ND	Spinosyn A	0.050	ND	Bifenthrin	0.050	ND
Naled	0.050	ND	Diazinon	0.050	ND	Flonicamid	0.050	ND
Metalaxyl	0.050	ND	Propiconazole	0.050	ND	Fludioxonil	0.050	ND

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