

**SAMPLE NAME:** R+R Medicinals 25mg Full Spectrum Hemp Extract Gummy Rings  
 Infused, Solid Edible

**CULTIVATOR / MANUFACTURER**

**Business Name:**  
**License Number:**  
**Address:**

**DISTRIBUTOR**

**Business Name:** R+R Medicinals  
**License Number:**  
**Address:**



**SAMPLE DETAIL**

**Batch Number:** Lot 2402  
**Sample ID:** 201123S001

**Date Collected:** 11/23/2020  
**Date Received:** 11/23/2020  
**Batch Size:**  
**Sample Size:** 1.0 units  
**Unit Mass:** 9 grams per Unit  
**Serving Size:** 9 grams per Serving



Scan QR code to verify authenticity of results.

**CANNABINOID ANALYSIS - SUMMARY**

**Total THC:** 0.126 mg/unit

**Total CBD:** 26.118 mg/unit

**Sum of Cannabinoids:** 26.586 mg/unit

**Total Cannabinoids:** 26.586 mg/unit

Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:  
 Total THC =  $\Delta 9\text{THC} + (\text{THCa} \cdot 0.877)$   
 Total CBD =  $\text{CBD} + (\text{CBDa} \cdot 0.877)$   
 Sum of Cannabinoids =  $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDa} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$   
 Total Cannabinoids =  $(\Delta 9\text{THC} + 0.877 \cdot \text{THCa}) + (\text{CBD} + 0.877 \cdot \text{CBDa}) + (\text{CBG} + 0.877 \cdot \text{CBGa}) + (\text{THCV} + 0.877 \cdot \text{THCVa}) + (\text{CBC} + 0.877 \cdot \text{CBCa}) + (\text{CBDV} + 0.877 \cdot \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$

Moisture: NT

Density: NT

Viscosity: NT

**SAFETY ANALYSIS - SUMMARY**

**$\Delta 9\text{THC}$  per Unit:** ✔ PASS

**Heavy Metals:** ✔ PASS

**Microbial Impurities (PCR):** NT

**Microbial Impurities (Plating):** NT

**$\Delta 9\text{THC}$  per Serving:** ✔ PASS

**Foreign Material:** NT

**Water Activity:** NT

**Vitamin E Acetate:** NT

**Pesticides:** ✔ PASS

**Mycotoxins:** NT

**Residual Solvents:** ✔ PASS

For quality assurance purposes. Not a Pre-Harvest Hemp Lab Test Report. These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

**Sample Certification:** California Code of Regulations Title 16 Effect Date January 16, 2019. Authority: Section 26013, Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

**Decision Rule:** Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

**References:** limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

  
 IQC verified by: Mackenzie Whitman  
 Date: 12/29/2020

  
 Approved by: Josh Wurzer, President  
 Date: 12/29/2020



CANNABINOIND TEST RESULTS - 11/24/2020

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD).

Method: QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

**TOTAL THC: 0.126 mg/unit**

Total THC ( $\Delta 9$ THC+0.877\*THCa)

**TOTAL CBD: 26.118 mg/unit**

Total CBD (CBD+0.877\*CBDA)

**TOTAL CANNABINOIDS: 26.586 mg/unit**

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) +  $\Delta 8$ THC + CBL + CBN

**TOTAL CBG: 0.090 mg/unit**

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: ND**

Total THCV (THCV+0.877\*THCVa)

**TOTAL CBC: 0.162 mg/unit**

Total CBC (CBC+0.877\*CBCa)

**TOTAL CBDV: 0.090 mg/unit**

Total CBDV (CBDV+0.877\*CBDVa)

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
CBD	0.004 / 0.011	±0.1390	2.902	0.2902
CBC	0.003 / 0.010	±0.0007	0.018	0.0018
$\Delta 9$ THC	0.002 / 0.005	±0.0010	0.014	0.0014
CBDV	0.002 / 0.007	±0.0005	0.010	0.0010
CBG	0.002 / 0.005	±0.0006	0.010	0.0010
$\Delta 8$ THC	0.01 / 0.02	N/A	ND	ND
THCa	0.001 / 0.002	N/A	ND	ND
THCV	0.002 / 0.008	N/A	ND	ND
THCVa	0.002 / 0.005	N/A	ND	ND
CBDA	0.001 / 0.003	N/A	ND	ND
CBDVa	0.001 / 0.003	N/A	ND	ND
CBGa	0.002 / 0.006	N/A	ND	ND
CBL	0.003 / 0.008	N/A	ND	ND
CBN	0.001 / 0.004	N/A	ND	ND
CBCa	0.001 / 0.004	N/A	ND	ND
<b>SUM OF CANNABINOIDS</b>			<b>2.954 mg/g</b>	<b>0.2954%</b>

Unit Mass: 9 grams per Unit / Serving Size: 9 grams per Serving

$\Delta 9$ THC per Unit	110 per-package limit	0.126 mg/unit	PASS
$\Delta 9$ THC per Serving		0.126 mg/serving	PASS
Total THC per Unit		0.126 mg/unit	
Total THC per Serving		0.126 mg/serving	
CBD per Unit		26.118 mg/unit	
CBD per Serving		26.118 mg/serving	
Total CBD per Unit		26.118 mg/unit	
Total CBD per Serving		26.118 mg/serving	
Sum of Cannabinoids per Unit		26.586 mg/unit	
Sum of Cannabinoids per Serving		26.586 mg/serving	
Total Cannabinoids per Unit		26.586 mg/unit	
Total Cannabinoids per Serving		26.586 mg/serving	

MOISTURE TEST RESULT

Not Tested
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DENSITY TEST RESULT

Not Tested
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VISCOSITY TEST RESULT

Not Tested
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## Pesticide Analysis

### CATEGORY 1 PESTICIDE TEST RESULTS - 11/25/2020 ✔ PASS

#### CATEGORY 1 AND 2 PESTICIDES

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). \*GC-MS utilized where indicated.

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Aldicarb				NT	
Carbofuran				NT	
Chlordane*				NT	
Chlorfenapyr*				NT	
<b>Chlorpyrifos</b>	0.02 / 0.06	≥ LOD	N/A	<b>ND</b>	<b>PASS</b>
Coumaphos				NT	
Daminozide				NT	
DDVP (Dichlorvos)				NT	
Dimethoate				NT	
Ethoprop(hos)				NT	
Etofenprox				NT	
Fenoxycarb				NT	
Fipronil				NT	
Imazalil				NT	
Methiocarb				NT	
Methyl parathion				NT	
Mevinphos				NT	
Paclobutrazol				NT	
Propoxur				NT	
Spiroxamine				NT	
Thiacloprid				NT	

### CATEGORY 2 PESTICIDE TEST RESULTS - 11/25/2020 ✔ PASS

<b>Abamectin</b>	0.03 / 0.10	0.3	N/A	<b>ND</b>	<b>PASS</b>
Acephate				NT	
Acequinocyl				NT	
Acetamiprid				NT	
<b>Azoxystrobin</b>	0.01 / 0.04	40	N/A	<b>ND</b>	<b>PASS</b>
<b>Bifenazate</b>	0.01 / 0.02	5	N/A	<b>ND</b>	<b>PASS</b>
<b>Bifenthrin</b>	0.01 / 0.02	0.5	N/A	<b>ND</b>	<b>PASS</b>
<b>Boscalid</b>	0.02 / 0.06	10	N/A	<b>ND</b>	<b>PASS</b>
Captan				NT	
Carbaryl				NT	
Chlorantraniliprole				NT	

Continued on next page





**Pesticide Analysis** *Continued*

**CATEGORY 2 PESTICIDE TEST RESULTS - 11/25/2020** *continued* ✔ PASS

**CATEGORY 1 AND 2 PESTICIDES**

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). \*GC-MS utilized where indicated.

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Clofentezine				NT	
Cyfluthrin				NT	
<b>Cypermethrin</b>	0.1 / 0.3	1	N/A	ND	<b>PASS</b>
Diazinon				NT	
Dimethomorph				NT	
<b>Etoazole</b>	0.010 / 0.028	1.5	N/A	ND	<b>PASS</b>
Fenhexamid				NT	
Fenpyroximate				NT	
Flonicamid				NT	
Fludioxonil				NT	
<b>Hexythiazox</b>	0.01 / 0.04	2	N/A	ND	<b>PASS</b>
<b>Imidacloprid</b>	0.01 / 0.04	3	N/A	ND	<b>PASS</b>
Kresoxim-methyl				NT	
<b>Malathion</b>	0.02 / 0.05	5	N/A	ND	<b>PASS</b>
Metalaxyl				NT	
Methomyl				NT	
<b>Myclobutanil</b>	0.03 / 0.1	9	N/A	ND	<b>PASS</b>
Naled				NT	
Oxamyl				NT	
Pentachloronitrobenzene*				NT	
<b>Permethrin</b>	0.03 / 0.09	20	N/A	ND	<b>PASS</b>
Phosmet				NT	
<b>Piperonylbutoxide</b>	0.003 / 0.009	8	N/A	ND	<b>PASS</b>
Prallethrin				NT	
<b>Propiconazole</b>	0.01 / 0.03	20	N/A	ND	<b>PASS</b>
Pyrethrins				NT	
Pyridaben				NT	
Spinetoram				NT	
Spinosad				NT	
<b>Spiromesifen</b>	0.02 / 0.05	12	N/A	ND	<b>PASS</b>
Spirotetramat				NT	
<b>Tebuconazole</b>	0.02 / 0.07	2	N/A	ND	<b>PASS</b>
Thiamethoxam				NT	
<b>Trifloxystrobin</b>	0.01 / 0.03	30	N/A	ND	<b>PASS</b>



 **Residual Solvents Analysis**

**CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS - 11/25/2020** ✔ PASS

**CATEGORY 1 AND 2 RESIDUAL SOLVENTS**

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS).

**Method:** QSP 1204 - Analysis of Residual Solvents by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Ethylene Oxide	0.1 / 0.4	1	N/A	ND	PASS
Methylene chloride	0.3 / 0.9	1	N/A	ND	PASS
Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS

**CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS - 11/25/2020** ✔ PASS

Acetone	20 / 50	5000	N/A	ND	PASS
Acetonitrile	2 / 7	410	N/A	ND	PASS
Butane	10 / 50	5000	N/A	ND	PASS
Ethanol	20 / 50	5000	N/A	ND	PASS
Ethyl acetate	20 / 60	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Heptane	20 / 60	5000	N/A	ND	PASS
Hexane	2 / 5	290	N/A	ND	PASS
Isopropyl Alcohol	10 / 40	5000	N/A	ND	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Pentane	20 / 50	5000	N/A	ND	PASS
Propane	10 / 20	5000	N/A	ND	PASS
Toluene	7 / 21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS

 **Heavy Metals Analysis**

**HEAVY METALS TEST RESULTS - 11/25/2020** ✔ PASS

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS).

**Method:** QSP 1160 - Analysis of Heavy Metals by ICP-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cadmium	0.02 / 0.05	0.5	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Arsenic	0.02 / 0.1	1.5	N/A	ND	PASS
Mercury	0.002 / 0.01	3	N/A	ND	PASS

**NOTES**

Client provided photo.





**Microbial Impurities Analysis**  
 PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

**Method:** QSP 1221 - Analysis of Microbial Impurities

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

**Method:** QSP 6794 - Plating with 3M™ Petrifilm™

**MICROBIAL IMPURITIES TEST RESULTS (PCR) - 11/29/2020** ✔ PASS

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Detect	ND	PASS
<i>Salmonella</i> spp.	Detect	ND	PASS
<i>Aspergillus fumigatus</i>		NT	
<i>Aspergillus flavus</i>		NT	
<i>Aspergillus niger</i>		NT	
<i>Aspergillus terreus</i>		NT	

**MICROBIAL IMPURITIES TEST RESULTS (PLATING)**

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	NT
Total Yeast and Mold	NT

**NOTES**

COA amended, update to order detail information.





### Mycotoxin Analysis

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS).

**Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

### MYCOTOXIN TEST RESULTS - 12/01/2020 ✔ PASS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	2.0 / 6.0	20	N/A	ND	PASS
Aflatoxin B2	1.8 / 5.6	20	N/A	ND	PASS
Aflatoxin G1	1.0 / 3.1	20	N/A	ND	PASS
Aflatoxin G2	1.2 / 3.5	20	N/A	ND	PASS
Total Aflatoxin		20		ND	PASS
Ochratoxin A	6.3 / 19.2	20	N/A	ND	PASS



### Microbial Impurities Analysis

PCR AND PLATING

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities.

**Method:** QSP 1221 - Analysis of Microbial Impurities

### MICROBIAL IMPURITIES TEST RESULTS (PCR)

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>		NT	
<i>Salmonella</i> spp.		NT	
<i>Aspergillus fumigatus</i>		NT	
<i>Aspergillus flavus</i>		NT	
<i>Aspergillus niger</i>		NT	
<i>Aspergillus terreus</i>		NT	

Analysis conducted by 3M™ Petrifilm™ and plate counts of microbial impurities.

**Method:** QSP 6794 - Plating with 3M™ Petrifilm™

### MICROBIAL IMPURITIES TEST RESULTS (PLATING) - 12/05/2020 ND

COMPOUND	RESULT (cfu/g)
Aerobic Plate Count	ND
Total Yeast and Mold	ND

#### NOTES

COA amended, update to order detail information.

