



# UNITED SCIENCE

811 Pine Street, St. Croix Falls, WI 54024

## CERTIFICATE OF ANALYSIS

<b>CUSTOMER:</b>	HOLUS	<b>SAMPLE NUMBER:</b>	
<b>PRODUCT NAME:</b>	RAPID RELIEF CREAM	<b>CERTIFICATION DATE:</b>	18MAR20
<b>PACKAGE SIZE:</b>	120 ML	<b>MANUFACTURE DATE:</b>	
<b>LOT NUMBER:</b>	20428	<b>RECERTIFICATION DATE:</b>	N/A
<b>DESCRIPTION</b>	RAPID RELIEF CREAM INFUSED WITH CBD		
<b>EXPIRATION DATE:</b>	MARCH 2023		
<b>STORAGE CONDITIONS:</b>	KEEP AWAY FROM EXPOSURE TO LIGHT.		
<b>STATE/COUNTRY OF ORIGIN(HEMP):</b>	WISCONSIN, USA		

POTENCY BY HPLC*		
CANNABINOID NAME	% POTENCY	CONC. mg/g
CANNABIDIOLIC ACID (CBDa)	ND	0.00
CANNABIDIOL (CBD)	0.346	3.46
<b>TOTAL CBD</b>	<b>0.346</b>	<b>3.46</b>
<b>TOTAL THC</b>	<b>ND</b>	<b>0.00</b>

TEST DESCRIPTION	SPECIFICATION	RESULTS	STATUS
<b>CBD</b>	400 mg	415 mg	PASS
APPEARANCE	CLEAR TO OPAQUE	AS SPECIFIED	PASS
SOLUBILITY	SPARINGLY SOLUBLE IN WATER	N/A	N/A
ORGANOLEPTIC	MILD SMELL	AS SPECIFIED	PASS

PESTICIDES BY LCMS/MS									
ANALYTE	Result (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	Status	ANALYTE	Result (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	Status
<b>ABAMECTIN</b>	<LOQ	0.500	0.100	PASS	<b>IMAZALIL</b>	<LOQ	0.200	0.100	PASS
<b>ACEPHATE</b>	<LOQ	0.400	0.100	PASS	<b>IMIDACLOPRID</b>	<LOQ	0.400	0.100	PASS
<b>ACEQUINOCYL</b>	<LOQ	2.000	0.750	PASS	<b>KRESOXIM METHYL</b>	<LOQ	0.400	0.100	PASS

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PESTICIDES BY LCMS/MS									
ANALYTE	Result (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	Status	ANALYTE	Result (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	Status
ALDICARB	<LOQ	0.400	0.100	PASS	METALAXYL	<LOQ	0.200	0.100	PASS
AZOXYSTROBIN	<LOQ	0.200	0.100	PASS	METHIOCARB	<LOQ	0.200	0.100	PASS
BOSCALID	<LOQ	0.200	0.100	PASS	METHOMYL	<LOQ	0.400	0.100	PASS
BIFENAZATE	<LOQ	0.400	0.100	PASS	MGK-264	<LOQ	0.200	0.100	PASS
BIFENTHRIN	<LOQ	0.200	0.100	PASS	MYCLOBUTANIL	<LOQ	0.200	0.100	PASS
CARBARYL	<LOQ	0.200	0.100	PASS	NALED	<LOQ	0.500	0.100	PASS
CARBOFURAN	<LOQ	0.200	0.100	PASS	OXAMYL	<LOQ	1.000	0.100	PASS
CHLORANTRANILIPROLE	<LOQ	0.200	0.100	PASS	PACLOBUTRAZOL	<LOQ	0.400	0.100	PASS
CHLORPYRIFOS	<LOQ	0.200	0.100	PASS	PARATHION- METHYL	<LOQ	0.200	0.250	PASS
CLOFENTEZINE	<LOQ	0.200	0.100	PASS	PERMETHRIN	<LOQ	0.200	0.100	PASS
CYPERMETHRIN	<LOQ	1.000	0.100	PASS	PHOSMET	<LOQ	0.200	0.100	PASS
DAMINOZIDE	<LOQ	1.000	0.100	PASS	PIPERONYLBUTOXIDE	<LOQ	2.000	0.100	PASS
DIAZINON	<LOQ	0.200	0.100	PASS	PRALLETHRIN	<LOQ	0.200	0.100	PASS
DICHLORVOS	<LOQ	0.100	0.100	PASS	PROPICONAZOLE	<LOQ	0.400	0.100	PASS
DIMETHOATE	<LOQ	0.200	0.100	PASS	PROPOXUR	<LOQ	0.200	0.100	PASS
ETHOPROPHOS	<LOQ	0.200	0.100	PASS	PYRETHRINS	<LOQ	1.000	0.100	PASS
ETOFENPROX	<LOQ	0.400	0.100	PASS	PYRIDABEN	<LOQ	0.200	0.100	PASS
ETOXAZOLE	<LOQ	0.200	0.100	PASS	SPINOSYN A	<LOQ	0.200	0.100	PASS
FENOXYCARB	<LOQ	0.200	0.100	PASS	SPINOSYN D	<LOQ	0.200	0.100	PASS
FIPRONIL	<LOQ	0.400	0.100	PASS	SPIROMESIFEN	<LOQ	0.200	0.100	PASS
FLONICAMID	<LOQ	1.000	0.100	PASS	TEBUCONAZOLE	<LOQ	0.400	0.100	PASS
FLUDIOXONIL	<LOQ	0.400	0.100	PASS	THIACLOPRID	<LOQ	0.200	0.100	PASS
HEXYTHIAZOX	<LOQ	1.000	0.100	PASS	THIAMETHOXAM	<LOQ	0.200	0.100	PASS
SPIROTETRAMAT	<LOQ	0.200	0.100	PASS	TRIFLOXYSTROBIN	<LOQ	0.200	0.100	PASS
SPIROXAMINE	<LOQ	0.400	0.100	PASS					

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HEAVY METALS BY ICP-MS				
ANALYTE	RESULT (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	STATUS
ARSENIC (As)	<LOQ	500.0	100.0	PASS
CADMIUM (Cd)	<LOQ	500.0	100.0	PASS
LEAD (Pb)	<LOQ	500.0	100.0	PASS
MERCURY (Hg)	<LOQ	500.0	100.0	PASS

MYCOTOXINS BY LCMS/MS				
ANALYTE	RESULT (PPB)	ACTION LEVEL (PPB)	LOQ (PPB)	STATUS
AFLATOXIN B1	<LOQ		6.0	PASS
AFLATOXIN B2	<LOQ		6.0	PASS
AFLATOXIN G1	<LOQ		6.0	PASS
AFLATOXIN G2	<LOQ		6.0	PASS
AFLATOXIN TOTAL	<LOQ	20.0	6.0	PASS
OCHRATOXIN A	<LOQ	20.0	12.0	PASS

MICROBIOLOGY BY PETRIFILM*			
ANALYTE	SPECIFICATION	RESULTS	STATUS
TOTAL AEROBIC COUNT	<1000 CFU/G	<10CFU/G	PASS
TOTAL YEAST AND MOLD	<100,000 CFU/G	<10CFU/G	PASS
E. COLI	ABSENT/10G	ABSENT	PASS
SALMONELLA SPP.	ABSENT/10G	ABSENT	PASS



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RESIDUAL SOLVENTS BY GC-HEADSPACE*			
ANALYTE	SPECIFICATION (PPM)	RESULTS (PPM)	STATUS
METHANOL	<3000	ND	PASS
PENTANE	<5000	ND	PASS
ETHANOL	<5000	ND	PASS
ACETONE	<5000	ND	PASS
N-HEXANE	<290	ND	PASS
ETHYL ACETATE	<5000	ND	PASS
HEPTANE	<5000	ND	PASS

## QUALITY APPROVED

DATE: 18MAR20

LABORATORY DIRECTOR, DR. TESHOME B.

*TESHOME B.*

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\*TESTING HAS A DEFINED "MEASUREMENT OF UNCERTAINTY" WHICH IS THE PARAMETER, ASSOCIATED WITH THE RESULT OF A MEASUREMENT, THAT CHARACTERIZES THE DISPERSION OF THE VALUES THAT COULD REASONABLY BE ATTRIBUTED TO THE PARTICULAR QUANTITY SUBJECT TO MEASUREMENT. THE MEASUREMENT OF UNCERTAINTY IS SIMILAR TO A MARGIN OF ERROR. WHEN THE MEASUREMENT OF UNCERTAINTY, NORMALLY EXPRESSED AS A +/- WITH A NUMBER, (E.G., +/- 0.05) IS COMBINED WITH THE REPORTED MEASUREMENT, IT PRODUCES A RANGE AND THE ACTUAL MEASUREMENT HAS A KNOWN PROBABILITY OF FALLING WITHIN THAT RANGE (TYPICALLY 95%). THIS DEFINITION IS BASED ON THE DEFINITION OF "UNCERTAINTY (OF MEASUREMENT)" IN SECTION 2.2.3 OF THE JOINT COMMITTEE FOR GUIDES IN METROLOGY 100:800, EVALUATION OF MEASUREMENT DATA—GUIDE TO THE EXPRESSION OF UNCERTAINTY IN MEASUREMENT (JCGM GUIDE). NIST TECHNICAL NOTE 1297, GUIDELINES FOR EVALUATING AND EXPRESSING THE UNCERTAINTY OF NIST MEASUREMENT RESULTS (TN 1297), IS BASED ON THE JCGM GUIDE. USDA ALSO RELIED ON THE EURACHEM/CO-OPERATION ON INTERNATIONAL TRACEABILITY IN ANALYTICAL CHEMISTRY'S "GUIDE ON USE OF UNCERTAINTY INFORMATION IN COMPLIANCE ASSESSMENT, FIRST EDITION 2007."

ND=<LOQ; TOTAL CBD= (CBDA\*0.877)+CBD; TOTAL THC= (THCA\*0.877)+THC; PPM= PARTS PER MILLION;

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PPB= PARTS PER BILLION

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