COVALENT
CUSTOM CANNABINOIDS

Facility ID: 17178984546

955 GRIER DRIVE, SUITE B, LAS VEGAS, NV 89119 USA | +1 (702) 766-4367 | QUALITY@COVALENTCBD.COM | COVALENTCBD.COM

PRODUCT SPECIFICATION:

THC-Free Water Soluble Liquid

Description

THC-Free Water Soluble Liquid is a raw cannabinoid ingredient that can be used in the manufacturing of retail products. This product is extracted from Federally Compliant, USA Grown Industrial Hemp in accordance with the Nevada Department of Agriculture *State of Nevada Hemp Plan* and Nevada Revised Statutes (NRS) 557.

General Information

Application and Use	For professional use only. Consumer Product Formulations in accordance with all applicable laws and regulations.
Composition	20% Cannabidiol (CBD) hemp extract by weight, 80% carrier agents
Organic Certification	Not certified
Storage and Shelf Life	24 months from date of production when stored in original packaging in a cool, dark and dry location.
Irradiation, ETO, and Sewage Sludge	No ionizing radiation, ethylene oxide, sewage, or sludge is used in the agricultural or manufacturing processes.
Residual Solvents	Ethanol (denatured with heptane) and heptane are used in the manufacturing process. No other solvents are used. Any residual solvents have been reduced by the manufacturing process to levels below those defined in (NRS) 557.
Pesticides	No pesticides are used in the agricultural or manufacturing processes. All materials are tested for pesticide residues and meet the specifications of (NRS) 557.

Ingredients

Ingredients	Distilled Water, Maltodextrin, Polysorbate 80, Cannabidiol (CBD) Hemp Extract Sucralose, Malic Acid Sodium Benzoate, Potassium Sorbate (as preservatives)		
Item Code	TFWSL	**Cannabinoid Concentration**	20% (200 mg/g)
Country of Origin	USA	**Botanical Source**	*Cannabis sativa*

Specification

Appearance	Milky white high low viscosity liquid
Odor / Flavor	No significant odor or flavor
Consistency	Free flowing liquid
Solubility	Soluble in water (98%+)

Cannabinoids Assay

Cannabinoid Potency - Testing Methods: *HPLC, UPLC, SFC*		
Cannabidiol (CBD)	LOQ: 0.010%	Specification: +/- 20%
Tetrahydrocannabinol (Δ9-THC)	LOQ: 0.010%	Specification: <LOQ%
Tetrahydrocannabinolic Acid (THCa)	LOQ: 0.010%	Specification: <LOQ%
Cannabigerol (CBG)	LOQ: 0.010%	Specification: <LOQ%
Cannabidiolic Acid (CBDa)	LOQ: 0.010%	Specification: <LOQ%
Tetrahydrocannabivarin (THCV)	LOQ: 0.010%	Specification: <LOQ%
Cannabichromene (CBC)	LOQ: 0.010%	Specification: <LOQ%

Cannabinol (CBN)	LOQ: 0.041%	Specification: <LOQ%
Delta-8-Tetrahydrocannabinol (Δ8-THC)	LOQ: 0.041%	Specification: <LOQ%
Cannabigerolic Acid (CBGa)	LOQ: 0.041%	Specification: <LOQ%
Cannabidivarin (CBDV)	LOQ: 0.041%	Specification: <LOQ%

Terpenes Assay

α-Bisabolol	LOQ: 0.0164%	Specification: <LOQ%
α-Humulene	LOQ: 0.0164%	Specification: <LOQ%
α-Pinene	LOQ: 0.0164%	Specification: <LOQ%
α-Terpinene	LOQ: 0.0164%	Specification: <LOQ%
β-Caryophyllene	LOQ: 0.0164%	Specification: <LOQ%
β-Myrcene	LOQ: 0.0164%	Specification: <LOQ%
β-Pinene	LOQ: 0.0164%	Specification: <LOQ%
Camphene	LOQ: 0.0164%	Specification: <LOQ%
Caryophyllene Oxide	LOQ: 0.0164%	Specification: <LOQ%
δ-3-Carene	LOQ: 0.0164%	Specification: <LOQ%
δ-Limonene	LOQ: 0.0164%	Specification: <LOQ%
y-Terpinene	LOQ: 0.0164%	Specification: <LOQ%
Geraniol	LOQ: 0.0164%	Specification: <LOQ%
Linalool	LOQ: 0.0164%	Specification: <LOQ%
Nerolidol	LOQ: 0.0164%	Specification: <LOQ%
Ocimene	LOQ: 0.0164%	Specification: <LOQ%
(-)-Guaiol	LOQ: 0.0164%	Specification: <LOQ%
(-)-Isopulegol	LOQ: 0.0164%	Specification: <LOQ%
p-Cymene	LOQ: 0.0164%	Specification: <LOQ%
Terpinolene	LOQ: 0.0164%	Specification: <LOQ%

Heavy Metals Assay

Arsenic	LOQ: 136.761 PPB	Specification: <LOQ%
Cadmium	LOQ: 136.761 PPB	Specification: <LOQ%
Lead	LOQ: 136.761 PPB	Specification: <LOQ%
Mercury	LOQ: 136.761 PPB	Specification: <LOQ%

Microbials Assay

Coliforms	Specification: < 1,000 CFU/g	**Aerobic Bacteria**	Specification: Not Detected
Total Yeasts & Molds	Specification: <1,000 CFU/g	**Powdery Mildew**	Specification: Not Detected
STEC E. coli	Specification: Not Detected	**Aspergillus niger**	Specification: Not Detected
Salmonella	Specification: Not Detected	**Aspergillus flavus**	Specification: Not Detected

Mycotoxins Assay

Aflatoxins	LOQ: 5.00 PPB	Specification: <LOQ%
Ochratoxin A	LOQ: 5.00 PPB	Specification: <LOQ%

Residual Solvents Assay

1,4 Dioxane	LOQ: 100 PPM	Spec: <LOQ%	**Pentanes**	LOQ: 500 PPM	Spec: <LOQ%
2-Butanol	LOQ: 500 PPM	Spec: <LOQ%	**n-Pentane**	LOQ: 500 PPM	Spec: <LOQ%
2-Ethoxy-Ethanol	LOQ: 100 PPM	Spec: <LOQ%	**Isopentane**	LOQ: 500 PPM	Spec: <LOQ%
2-Propanol IPA	LOQ: 500 PPM	Spec: <LOQ%	**Neopentane**	LOQ: 500 PPM	Spec: <LOQ%
Acetone	LOQ: 500 PPM	Spec: <LOQ%	**Butanes**	LOQ: 500 PPM	Spec: <LOQ%
Acetonitrile	LOQ: 100 PPM	Spec: <LOQ%	**n-Butane**	LOQ 500 PPM	Spec: <LOQ%
Benzene Cumene	LOQ: 1 PPM	Spec: <LOQ%	**Isobutane**	LOQ: 500 PPM	Spec: <LOQ%
Cyclohexane	LOQ: 50 PPM	Spec: <LOQ%	**Hexanes**	LOQ: 50 PPM	Spec: <LOQ%
Dichloromethane	LOQ: 500 PPM	Spec: <LOQ%	**n-Hexane**	LOQ: 50 PPM	Spec: <LOQ%
Ethyl-Acetate	LOQ: 100 PPM	Spec: <LOQ%	**2-Methyl-Pentane**	LOQ: 50 PPM	Spec: <LOQ%
Ethyl-Ether	LOQ: 500 PPM	Spec: <LOQ%	**3-Methyl-Pentane**	LOQ: 50 PPM	Spec: <LOQ%
Ethylene-Glycol	LOQ: 500 PPM	Spec: <LOQ%	**2,2-Dimethyl-Butane**	LOQ: 50 PPM	Spec: <LOQ%
Ethylene Oxide	LOQ: 300 PPM	Spec: <LOQ%	**2,3-Dimethyl-Butane**	LOQ: 50 PPM	Spec: <LOQ%
Heptane	LOQ: 20 PPM	Spec: <LOQ%	**Xylenes**	LOQ: 300 PPM	Spec: <LOQ%
Isopropyl-Acetate	LOQ: 500 PPM	Spec: <LOQ%	**m-Xylene**	LOQ: 300 PPM	Spec: <LOQ%
Methanol	LOQ: 500 PPM	Spec: <LOQ%	**o-Xylene**	LOQ: 300 PPM	Spec: <LOQ%
Propane	LOQ: 100 PPM	Spec: <LOQ%	**p-Xylene**	LOQ: 300 PPM	Spec: <LOQ%
Terahydrofuran	LOQ: 500 PPM	Spec: <LOQ%	**Ethyl-Benzene**	LOQ: 300 PPM	Spec: <LOQ%
Tolulene	LOQ: 100 PPM	Spec: <LOQ%			

Pesticides Assay

Abamectin	LOQ: 1.00 PPM	Spec: <LOQ%	**Fludioxonil**	LOQ: 1.00 PPM	Spec: <LOQ%
Acequinocyl	LOQ: 0.50 PPM	Spec: <LOQ%	**Imidacloprid**	LOQ: 1.00 PPM	Spec: <LOQ%
Bifenazate	LOQ: 1.00 PPM	Spec: <LOQ%	**Mycobutanil**	LOQ: 1.00 PPM	Spec: <LOQ%
Bifenthrin	LOQ: 1.00 PPM	Spec: <LOQ%	**Paclobutrazol**	LOQ: 1.00 PPM	Spec: <LOQ%
Cyfluthrin	LOQ: 0.30 PPM	Spec: <LOQ%	**Piperonyl Butoxide**	LOQ: 0.50 PPM	Spec: <LOQ%
Cypermethrin	LOQ: 1.00 PPM	Spec: <LOQ%	**Pyrethins**	LOQ: 0.50 PPM	Spec: <LOQ%
Daminozide	LOQ: 1.00 PPM	Spec: <LOQ%	**Quintozene**	LOQ: 1.00 PPM	Spec: <LOQ%
Dimethomorph	LOQ: 1.00 PPM	Spec: <LOQ%	**Spinetoram**	LOQ: 1.00 PPM	Spec: <LOQ%
Etoxazole	LOQ: 1.00 PPM	Spec: <LOQ%	**Spinosad**	LOQ: 1.00 PPM	Spec: <LOQ%
Fenhexamid	LOQ: 1.00 PPM	Spec: <LOQ%	**Spirotetramat**	LOQ: 1.00 PPM	Spec: <LOQ%
Flonicamid	LOQ: 1.00 PPM	Spec: <LOQ%	**Thiamethoxam**	LOQ: 1.00 PPM	Spec: <LOQ%

ADDITIONAL INFORMATION

This information is provided for documentation purposes only and is not intended to replace independent 3rd party lab analysis.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any end use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information for customized products that vary from these product specifications.

QUALITY ASSURANCE DOCUMENTS:

GMP COMPLIANCE STATEMENT

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Covalent CC, LLC operates under current Good Manufacturing Practices (cGMP) and has established the internationally recognized Hazard Analysis and Critical Control Points (HACCP) system for consumer product safety standards. To achieve our goal, we:

- ☑ Apply sound safety technology, science, and industry best practices into our quality systems
- ☑ Perform regular identification of hazards, determination of critical control points and timely implementation of effective control and monitoring measures
- ☑ Conform to regulatory requirements and the agreed customer requirements
- ☑ Define product safety objectives and continually review to ensure consistent compliance
- ☑ Communicate, implement and maintain this policy at all levels of the company
- ☑ Employ consistent staff, contract manufacturers and source from reliable suppliers
- ☑ Provide our personnel with adequate information, training, instructions, tools and equipment to perform their job in a hygienic and professional manner
- ☑ Promote personal hygiene and cleanliness to our staff, contractors, suppliers and visitors
- ☑ We strive to continually improve our processes to ensure the delivery of safe consumer products through efficient, effective and suitable safety management systems

Kelly Ann Bortman

Kelly Ann Bortman
Founder & President