



Product Specification Sheet

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Product # Dessert Emulsified Oil

Revision 1.0 · 28 July 2026

Information	
Product description	Terpene Belt Farms Dessert Emulsified Oil — a water-dispersible, beverage-ready emulsion of 'Fresh Never Frozen'® native natural hemp essential oil in a food-grade carrier system. A non-cannabinoid flavor and aroma active: total THC and total CBD are Not Detected.
Product name	Dessert Emulsified Oil
Product SKU	TBF-111-SV-23-DE-WS
Product status	Business-to-business intermediate ingredient for further manufacturing. Not a finished consumer product; not supplied for retail sale.
Essential oil input	2023 Dessert #111 Fresh Never Frozen® hemp essential oil (TBF-111-SV-23-DE-EO)
Botanical name	<i>Cannabis Sativa</i> L. (essential oil fraction)
CAS RN®	Mixture. Essential oil fraction: 2159055-70-4
Plant part used	All aerial parts (>95% Inflorescences)
Production method	Steam-distilled hemp essential oil emulsified into a food-grade carrier system
Composition	Hemp essential oil 5.0% w/w; food-grade emulsion carrier system 95.0% w/w. Carrier ingredients: proprietary blend of plant-derived carriers and emulsifiers, xylitol, vitamin E, medium-chain triglyceride (MCT) oil, potassium sorbate (preservative), ascorbic acid (antioxidant).
Quality	Essential oil fraction (Dessert Blend) is Generally Recognized As Safe under 21 CFR 170.30(b) by scientific procedures, supported by an independent GRAS Expert Panel convened by Exponent, Inc. Carrier system ingredients are GRAS under 21 CFR 170.3 and 170.30. Essential oil fraction is native and unadulterated, ISO 9001:2015, Non-GMO, Non-Animal, EU & US Natural.
Appearance	Opaque off-white to pale amber liquid
Odor	Characteristic sweet dessert-forward terpene aroma
Solubility	Water dispersible; forms a stable dispersion in aqueous beverage systems
Parameter	Specification
Total terpenes	50 mg/g (5.0% w/w) nominal Range: 40 – 60 mg/g
Total THC	Not Detected
Total CBD	Not Detected
Water activity	≤ 0.85 aw Typical: 0.76 aw
pH	5.5 – 6.5 (carrier system specification)
Density	1.1 – 1.3 g/mL (carrier system specification)
Droplet size	200 – 350 nm (carrier system specification)
Flash Point	Not applicable — aqueous emulsion; non-flammable
Microbiological	Total Plate Count <10,000 cfu/g; Yeast and Mold <1,000 cfu/g; Coliform <10 cfu/g; E. coli negative; Salmonella negative
Aflatoxins and Ochratoxin A	Tested with validated methods in 3rd party ISO 17025 certified laboratory to limits specified as per DCC Commercial Cannabis Regulations Article 5, §15717 through §15725. Finished product is non-detect for total THC and all reported cannabinoids.
Pesticides	
Heavy metals	
Microbial	
Residual Solvents	
Foreign Matter	
Cannabinoids	



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Stability & storage	Store refrigerated at 33 – 38 °F (0.5 – 3.3 °C) in a tightly closed container, protected from light and oxygen. Shelf life 1 year from date of manufacture. Do not freeze. Shake thoroughly before use.
Regulatory	Classified under GHS as Skin Sens. 1 (H317). See the Safety Data Sheet for this SKU for full hazard, handling and regulatory information, including California Proposition 65 status.

Components	Specification	CAS RN®
Limonene	1.03 – 1.54%	138-86-3
β-Ocimene	0.62 – 0.93%	13877-91-3
β-Caryophyllene	0.58 – 0.87%	87-44-5
α-Pinene	0.24 – 0.37%	80-56-8
α-Humulene	0.20 – 0.30%	6753-98-6
β-Myrcene	0.19 – 0.28%	123-35-3
β-Pinene	0.14 – 0.22%	127-91-3
Linalool	0.10 – 0.15%	78-70-6
Other terpenes	0.90 – 1.34%	N/A
Total terpenes	4.00 – 6.00%	—

Composition is derived from the full GC-FID/MS characterisation of the 2023 Dessert #111 essential oil input (Laboratoire PhytoChemia report 24E28-TBP02, 99.43% of the oil characterised across 127 constituents) applied at the 95:5 carrier-to-oil formulation ratio, giving a nominal 50 mg/g total terpene content. Finished-product terpene screens that use a restricted analyte list will report a lower total; a typical 21-analyte panel captures approximately 80% of this profile.

All DCC Article 5 §15714 required testing done by Harrens. Harrens Cannabinoids LOD, LOQ (mg/g): d9-THC 0.20, 0.60; THCa 0.30, 0.80; CBD 0.20, 0.60; CBDa 0.10, 0.40; CBN 0.20, 0.60; CBG 0.20, 0.50; CBGa 0.40, 1.10; CBC 0.20, 0.50; THCV 0.20, 0.60; d8-THC 0.20, 0.50.

Recommended use levels

Maximum use levels apply to the essential oil fraction, not to the emulsified product as supplied. Dessert Emulsified Oil contains 5.0% w/w essential oil, so the corresponding limit on the product is twenty times the essential oil limit.

Beverage category	Max essential oil	Max Dessert Emulsified Oil
Fruit drinks; RTD tea; flavored and carbonated water; enhanced water and functional beverages; nutritional beverages and mixes; energy drinks; RTD coffee	0.005% (50 ppm)	0.10% w/w
Non-alcoholic bitters; non-alcoholic beer	0.020% (200 ppm)	0.40% w/w

Addition by container, at three inclusion rates. Rates are percent by weight of finished beverage; millilitre figures assume a product density of 1.2 g/mL and a beverage density of 1.0 g/mL. The 0.40% column applies only to non-alcoholic bitters and non-alcoholic beer; for all other categories 0.10% is the maximum.

Addition (mL)	0.05% w/w	0.10% w/w	0.40% w/w
Resulting essential oil level	25 ppm	50 ppm	200 ppm
12 oz Can (355 mL)	0.15	0.30	1.18
US Pint (473 mL)	0.20	0.39	1.58
Liter (1000 mL)	0.42	0.83	3.33
Half Keg (29.32 L)	12.2	24.4	97.7
Keg (58.64 L)	24.4	48.9	195.5

Half Keg = 29.32 L; Keg = 58.64 L. Use levels must remain consistent with good manufacturing practice. Customers should validate inclusion rate, flavor impact and stability in their own formulation and packaging.



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Nutritional information

Nutrient	Value / 100 g	Units
Calories	414	Cal
Total Fat	15.2	g
Saturated Fat	9.2	g
Trans Fat	0	g
Cholesterol	0	mg
Sodium	0	mg
Total Carbohydrate	83.3	g
Dietary Fiber	0	g
Total Sugars	0	g
Sugar Alcohol	4.3	g
Protein	0	g
Vitamin D	0	mcg
Calcium	0.9	mg
Iron	0	mg
Potassium	0	mg

Values per 100 g, calculated from ingredient specifications and the 95:5 formulation ratio. Saturated fat is the medium-chain triglyceride fraction of the carrier system. Not laboratory-determined; customers preparing a finished-product nutrition panel should verify by analysis of their own formulation.

Allergen information

Allergen	Present in product	Shared equipment / facility
Peanuts and peanut products	No	No
Tree nuts	No	No
Coconut	No	No
Soy and soy derivatives	No	Yes
Seeds and derivatives	No	No
Sesame	No	No
Egg and egg products	No	No
Fish, shellfish and crustaceans	No	No
Milk and derivatives	No	No
Wheat and gluten	No	Yes
Mustard	No	No
Sulphites (>10 ppm)	No	No

The table above records the allergen status of each input to this product as confirmed by the respective ingredient suppliers. No major allergen is present in the product. The carrier system is manufactured on shared equipment and in a shared facility with soy-, wheat- and gluten-containing products; customers may wish to carry a cross-contact advisory on finished goods where this is material to their own allergen programme. The product is vegan and contains no animal-derived ingredients.