

200 Proof Food Grade Ethanol is anhydrous, undenatured ethyl alcohol at 100% purity ($\geq 99.97\%$ ABV). Grain-derived and certified to USP/NF and FCC standards, it is the preferred solvent for botanical extraction, tinctures, food processing, cosmetics, and laboratory applications requiring the highest purity food-safe solvent.

SECTION 1: PRODUCT IDENTIFICATION

Product Name	200 Proof Food Grade Ethanol
CAS Number	64-17-5
Chemical Name	Ethyl Alcohol; Ethanol; Grain Alcohol
Molecular Formula	C_2H_6O MW: 46.07 g/mol
Purity	$\geq 99.97\%$ (200 Proof / 100% ABV)
Grade	USP/NF, FCC (Food Chemicals Codex), Food Grade
Denaturant	None — undenatured
Source	Grain-derived (corn/sugarcane)
UN Number	UN1170
Supplier	Cannagas Supply 97 Turnpike Rd, Westborough, MA 01581 877-710-1965 Sales@canna-gas.com

SECTION 2: PHYSICAL & CHEMICAL PROPERTIES

Physical State	Clear, colorless liquid	Specific Gravity	0.789 g/mL at 20°C
Odor	Sweet, characteristic alcohol odor	Solubility	Completely miscible with water
Boiling Point	78.3°C (173.0°F) at 1 atm	LEL / UEL	3.3% / 19.0% in air
Flash Point	12.8°C (55°F) — Closed Cup	Vapor Density	1.6 (air = 1)
Auto-ignition	362.8°C (685°F)	pH	Neutral (~7.0)
Vapor Pressure	59.5 hPa at 20°C (68°F)	Viscosity	1.2 mPa·s at 20°C

SECTION 3: QUALITY SPECIFICATIONS

Ethanol Content	$\geq 99.97\%$ (200 Proof)
Water Content	$\leq 0.03\%$ (anhydrous)
Methanol	$\leq 0.005\%$ (not detectable by USP method)
Acidity	Passes USP test (≤ 0.003 meq/g)
Color	Clear, colorless — APHA color ≤ 10
Odor	Characteristic — no foreign or disagreeable odors
Aldehydes	Passes USP test
Non-volatile matter	≤ 0.001 g per 100 mL
Certifications	USP/NF, FCC, Kosher available, GRAS (21 CFR 184.1293)

SECTION 4: APPLICATIONS & USAGE

Botanical Extraction	Preferred food-safe solvent for herbal tinctures, botanical oils, and plant extracts. Miscible with water and most organic compounds.
Food Processing	Approved food additive/processing aid per 21 CFR 184.1293. Used in flavor extraction, preservation, and formulation.
Laboratory Use	General purpose analytical and research solvent. Compatible with GC, HPLC, UV-Vis, and other analytical methods.
Cosmetics & Personal Care	Used in perfumes, toners, hand sanitizers, and skin care formulations.
Pharmaceuticals	Meets USP/NF requirements for pharmaceutical compounding and formulation.
Cleaning & Sanitation	Effective surface disinfectant and equipment cleaning agent.
Solvent Ratio	For botanical extraction: typically 1:5 to 1:10 (biomass to solvent) depending on material and desired concentration.
Temperature	Cold (-40°C to -20°C) ethanol extraction yields cleaner, more selective extracts with reduced chlorophyll pickup.

SECTION 5: STORAGE & HANDLING

Storage	Store in cool, dry, well-ventilated area away from heat, sparks, and open flames. Keep in tightly sealed containers. Store away from strong oxidizers.
Shelf Life	Indefinite when stored properly in sealed containers away from light and heat.
Containers	Compatible with stainless steel, glass, and HDPE. Avoid copper, aluminum alloys, and unlined carbon steel for long-term storage.
Temperature	Store below 30°C (86°F). Keep away from ignition sources at all times.

SECTION 6: REGULATORY & SAFETY SUMMARY

■ **SAFETY NOTE:** HIGHLY FLAMMABLE liquid and vapor (GHS Category 2, H225). Flash point 12.8°C (55°F). Keep away from heat, sparks, and open flames at all times. Use explosion-proof equipment. Refer to SDS for complete hazard, PPE, and emergency response information.

GHS Signal Word	DANGER
Key Hazards	H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation.
DOT Classification	Class 3 Flammable Liquid, UN1170, PG II
TTB / Regulatory	Undenatured ethanol requires TTB permit for commercial purchase in many states. Confirm applicable TTB and state alcohol regulations before ordering.
GRAS Status	Ethyl alcohol is GRAS as food additive per 21 CFR 184.1293.
SDS Reference	Full SDS available from Cannagas Supply. CHEMTREC: 1-800-424-9300.

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