

Ethanol Extraction

With the huge influx of hemp flower and demand for hemp derived full spectrum oil and CBD, processors have turned to huge batch fed extraction methods.

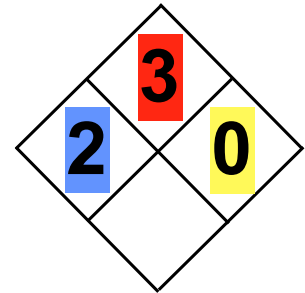


CAS 64-17-5

Ethanol extraction is a low initial cost entry method to get a fast botanical extract. For the processor, it's a quick way to turn cash flow.

For the consumer, they are unwittingly purchasing a product that is cheap to produce, but lacks the robust components when using CO2, or water extraction. Think of product shorting.

The long term results of ethanol processing are higher consumable costs, a highly flammable process requiring fire code compliance (Class 1 Div 2 D), and poor quality product. On the consumer side, the product shorting may not actually address why the consumer purchased the product in the first place (i.e. reducing inflammation from valuable terpenes and CBD's).



Class 1 Division 2 Group D flammable liquid

PRODUCT

Fast Extraction: Large quantities of hemp need to be extracted at harvest time, and ethanol is one extraction method for bulk processing fast.

Low Capital Cost: Large batch fed assemblies are inexpensive to acquire.

Big Batch Quantity: .5 to .6 gallons of ethanol per pound botanical input. Can scale up to almost any size tank or batch.

Super Chill Extraction and Winterization: If you chill with CO2 or nitrogen down below -70 F, you can optimize extraction and winterization simultaneously.

PROFIT

Poor Overall Efficiency: Unless you use good quality (expensive) ethanol, poor overall extraction efficiency.

Terpenes: Poor terpene retention.

Appearance and Bitter Taste: Unless high quality solvent, expect green tints and bitter taste from chlorophyll.

Lack of Active Hemp Components: Depending on process, you may lose terpenes and CBD's.

Ethanol Recovery: A slow process to recover some of the consumable.

Lipids (Waxes): Ethanol pulls out long chain fatty acids very efficiently.

TIME

Carbon Filtering: Many processors use carbon filters to remove the green tint and bitter taste, which also removes the CBD's.

Poor Quality Ethanol: Expensive ethanol has low water content (good). Cheap ethanol (80-90 proof for example) has water content, which further reduces the quality of the extract (i.e. more green, bitter tasting chlorophyll, and poor extraction efficiency (bad).

Ethanol Storage Compliance vs. Expensive Rotary Evaporators: There are some huge compliance issues for storage. A potential solution is a large, but expensive, rotary evaporator to increase ethanol recovery.