



CO2 Extraction – Solvent Extraction – Dry Ice/Ice Extraction

Cannabis/hemp extracts are a booming segment of the legal cannabis market which is projected to grow to nearly \$53B by 2026. This includes medicinal use as well as concentrates for the food & beverage industry, vape cartridges and products for the retail consumer. It's not just THC and CBD that produce the effects of cannabis that are being extracted. Scientists are finding benefits of other cannabinoids such as CBC, CBG, THCv, and CBN.

EXTRACTION METHODS: The goal of extraction is to generate a high-concentrate cannabinoid (the active ingredients in cannabis) product for potential beneficial use.

- **SUPERCritical CO2:** Used to help remove phytochemicals from cannabis/hemp plants. Supercritical materials have properties of both a gas and liquid—making them ideal for plant extraction because they can move through materials like gas and dissolve like a liquid. Method is safe when done professionally, CO2 is proven safe for consumption, yields high-quality CBD, and machines are highly reliable.
- **SOLVENT-BASED EXTRACTION:** A favorite of the extraction industry, especially for food, pharmaceuticals, and personal care products. U.S. Pharmacopeial Convention and the FDA divide over 59 extraction solvents into three classes: those to be avoided, those under strict regulation, those with their use limited by only GMP and other quality-based standards. Four most common types and benefits:
 - Hydrocarbons such as butane/propane – High volatility, low toxicity risk, high efficacy and efficiency and specificity.
 - Hydroxyl compounds, with isopropyl alcohol and ethyl alcohol (ethanol) being the most preferred – Less specific than hydrocarbons but lower risk of toxicity than other compounds like methanol.
 - Ethanol (FCC, USP, HPLC & GNS grades) – High efficiency, lab and health safe, easy to store, relatively inexpensive.
 - Tetrafluoroethane Extraction/Terpene Wash – Similar to CO2 extraction; produces full-spectrum, post-winterized extracts, isolates terpenes, live resins, and cannabinoids. Simple to use, safe, inexpensive, easily scalable, highly effective and efficient.
- **DRY ICE/ICE EXTRACTION:** Creates a powdery resin extract often referred to as “hash” or “bubble hash.” Inexpensive, high yields (if done correctly), CO2 is safe for consumption.

OUR MISSION

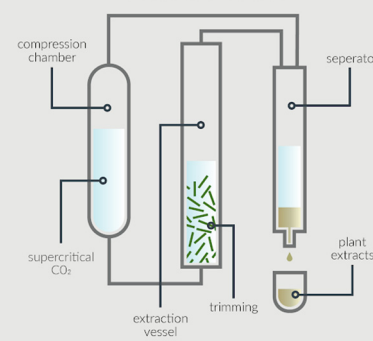
Help our cannabis customers thrive by supplying the specialty gases needed to deliver high quality, safe cannabis compounds to the markets you serve. We are responsive, promise accurate/on-time deliveries, and provide after-hours emergency technical and outage support.



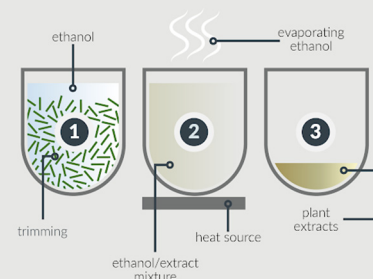
*SOURCE: <https://www.powerblanket.com/blog/cbd-extraction-methods/>

CBD EXTRACTION METHODS

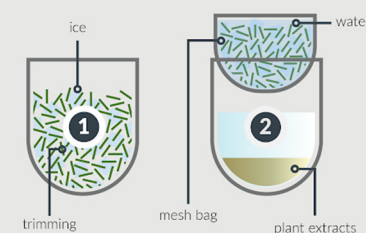
CO₂ EXTRACTION



SOLVENT EXTRACTION



ICE WATER EXTRACTION





Consistently delivering high purity gases and hydrocarbons that satisfy a wide array of specialized applications and industries. Backed by a certified lab and decades of gas distribution experience.

HIGH PURITY HYDROCARBONS SPECIALTY MIXES CRYO GASES

ABOUT US

We offer a consistent, reliable supply of high purity hydrocarbons and gases, and services and products that optimize performance across a wide array of applications.

This includes technical consultation with our in-house experts; specialized, supportive equipment; and turnkey, no-hassle logistics and delivery. Backed by a certified lab and safe, reliable packaging options—all aimed at exceeding your business and application needs and expectations.

OUR OFFERINGS



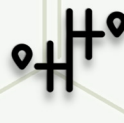
HIGH PURITY GASES



CERTIFIED LAB & COMPLIANCE



TECHNICAL EXPERTISE



TURNKEY, NO-HASSLE LOGISTICS



SUPPORTIVE EQUIPMENT & SERVICES

PACKAGING

We offer packaging options to fit a wide variety of needs. DOT approved. Stocked on site. Available in low and high pressure, cylinders and gas packing.



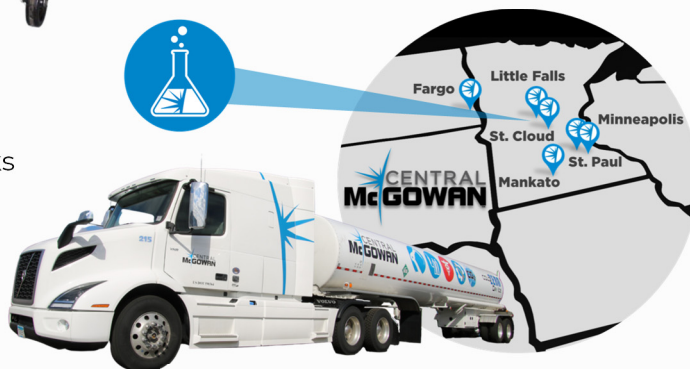
SERVICES

Cylinder inspection, certifications, painting, valving and safety reliefs.

OUR LAB & DISTRIBUTION AREA

We have locations across Minnesota and Fargo. Our large bulk fleet and route trucks make daily stops and deliveries. And we provide 365/24/7 emergency support.

Our state-of-the-art lab is located in Central Minnesota, with the capability of producing and delivering almost any gas mix you need.



contact us

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