

In regards to the rapidly evolving marijuana industry and the associated cannabis distillation process, there are a multitude of questions being asked. While some people may know all about distilled THC extract, they may not realize the benefits of a fractional distillation machine.

Below are a few questions recently posed to us and the answers we hope will enlighten you as much .

1. Where are the products manufactured?

At Zhengzhou, A city in Henan Province of China. The equipment is made, fully tested and serviced in our facility, and nearly every subcomponent is perfect., and we can delivery the goods within shorter days to most other countries worldwide.

3. Is molecular distillation similar to extraction?

No, they are quite different operations. With extraction, solids, (or sometimes liquids) are brought into contact with a solvent. In cannabinoid work, the solvent is typically ethanol, or butane/propane, or supercritical pressurized CO<sub>2</sub>, or others. Certain compounds such as cannabinoids, terpenes, chlorophyll are dissolved into the solvent, after which the solvent is evaporated away. The separation is accomplished via an affinity of the target compounds to be transferred by dissolution into the solvent. With distillation, the separation is carried out not by solvent affinity, but by differences in

the volatility (boiling points), between the various compounds. More volatile materials are more easily distilled and condensed as distillate while the heavier materials remain as liquid collected as residue. Distillation is performed after extraction to further concentrate and purify the desired compounds.

4. What level of purity is expected?

It depends on the quality and composition of the feed material, factors going back to the original plant strains plus all subsequent handling and processing prior to distillation. Often, extracted material prior to distillation is in a range of 55-70% cannabinoid, and it is typical to distill this up to a range from 85-90+%, with up to 96% being reported. In addition to increased percentage purity, the product is significantly lighter yellow in color, with high clarity.

5. Does molecular distillation require addition of solvents?

No, additional solvents or other compounds do not need to be added to the feed material. This question often arises because potential users know that concentrate from extraction can be quite thick and viscous. But rather than using “thinning agents” such as solvents, the high viscosity or melting point of cannabinoids is handled by keeping materials warm enough to flow throughout the entire set of distillation components. Equipment needed for these heating

functions is provided in the Pope still systems configured for cannabinoid applications – there is nothing else needed to buy.

10. Does the operator need to be highly educated and experienced to operate the equipment?

Not necessarily, but this is not a “set it and forget it” operation such as in the case of a rotary evaporator or other simple batch device. Being that this is normally the final processing step prior to packaging, that the feed material can have varying composition and quality, that the final product specification goals of various batches may vary depending on management, marketing and retailer preferences,, there is some thought that goes into proper operation. With good analytical information on the distillation feed material, well laid out product goals, and an operator who is interested and strives to learn and to accomplish these goals, there will be much greater success than where some of these factors are missing.

11. Does this equipment work well for distillation after different types of extraction methods and other processing steps?

Yes. Whether the extraction method used is butane/propane, supercritical CO<sub>2</sub>, ethanol or other means, will perform excellently and will significantly increase product purity. And whether or not the

material has been winterized, (dewaxed), or whether or not it has been decarboxylated, the distillation will likewise provide excellent results. Of course the final product purity, yield and appearance is also affected by initial plant strain and quality, the type and quality of the extraction process and the subsequent steps carried out prior to distillation. There are some rule of thumbs as well, for example, material that has been winterized will result in distilled product that is more optically clear and of greater purity than non-winterized material.