THE REAL THING

'Natural' and 'organic' e-liquids are gaining ground, but vapers should be aware of what those labels mean.

By Timothy S. Donahue

lavor keeps customers coming back. While some vapers say that artificially flavored e-liquids pack more flavor punch than organic or naturally flavored juice, a growing number of consumers disagrees. What isn't up for debate is that "organic" and "natural" e-liquids are among the vapor industry's fastest-growing segments. A poll on www.vapingunderground.com, a consumer forum, attributes this development to the taste and thickness of natural liquids. "Like an organic grocery shopper, our consumer tries the product because it's organic and buys it the second time for the flavor and quality," says Joseph Fuisz, co-founder of Vapor Tobacco Manufacturing (VTM), one of the first certified-organic e-liquid producers in the U.S.

"Consider the taste of a fresh strawberry versus an artificial strawberry candy. We like to think of our naturally flavored product as the real thing," says Beth Roessler of Alchemy e-Lixirs, a Los Angeles, California, USA-based e-liquid company that markets "natural" products with organic ingredients. "As far as vapor production is concerned, it seems to be the general opinion of the vaping community that VG [vegetable glycerin] is the way to go when you are looking for thicker, heavier clouds."

One issue that seems to irk customers who prefer natural and organic e-liquids, however, is the labeling. Fuisz says that, unfortunately, a lot of companies marketing "organic" e-liquids are not certified. "That's a bad thing for consumers because they do not know what they are buying," he says. The easiest way to know an e-liquid is truly organic is to look for the U.S. Department of Agriculture's (USDA) "certified

organic" seal on the e-liquid's label. Third-party agents around the world certify operations using USDA organic standards.

In order for an e-liquid company to use the USDA seal, all raw products in the liquid must be certified-organic products labeled with the USDA organic seal, according to the USDA website. "The USDA National Organic Program establishes strict organic standards. This way, consumers know that the USDA organic seal means they are buying a truly organic product," says Fuisz. "Companies can describe lots of organic ingredients, but absent organic certification, I would not trust organic labeling claims."

The organic label means that the product contains at least 95 percent organically produced and processed ingredients. Consumers might also see a label with a percentage indicating how much of the product qualifies as organic. Any product containing less than 70 percent organic ingredients cannot use the organic label, according to the USDA. These products can only list individual ingredients as organic. Organic products must also indicate the certification agency and indicate each organic ingredient on the label.

The natural label, however, has become ubiquitous. The U.S. government does not regulate the use of the word "natural" on products except for poultry and other meats. An e-liquid company could call its product natural even if it did not include any natural products, such as a propylene glycol (PG) liquid with an artificial flavoring and no nicotine. The natural label ideally means minimally processed and without artificial additives. The lack of regulation, however, makes it difficult for consumers to determine if this is the case.

In late 2014, Florida, USA-based VTM became the first





Vapers are increasingly interested in 'organic' and 'natural' e-liquids.

company to launch certified-organic e-liquids for the vapor industry that carried the USDA organic seal. Those first products, the eTron 3T e-liquids and disposable e-cigarettes, consisted of only tobacco and menthol flavors. VTM's organic tobacco e-liquid offerings are made from organic tobacco, organic VG and purified water. "That's it—no additional ingredients or process agents are used," says Tom O'Connell, co-founder of VTM. "Our organic menthol gives the adult menthol smoker the underlying tobacco notes they expect, together with strong organic menthol flavor," he explains, adding that eTron 3T is made using a solvent-free process. "Our patented water-extraction system makes it a lot easier to make a certified organic process."

It should be noted that because PG is a form of mineral oil, any e-juice using PG should not be labeled as natural or organic. However, some companies sell PG-based liquids using natural and organic flavorings (and often label their product as natural). VG is produced from palm, soy or coconut oil, which are natural and can be organically produced, according to Roessler, whose company began selling e-liquids produced with organic raw ingredients after seeing the negative consequences that PG and artificial flavoring can have on individuals with sensitivity or allergies to these substances.

"We wanted to provide a safer alternative. Other companies in the industry that claim to be 100 percent organic or 100 percent VG often are only referring to the base that their flavoring is steeped in. You may still find PG in artificial flavoring or if a PG diluted nicotine has been utilized," she says. "We are unique because every aspect of our e-liquid is 100 percent natural and organic, including our vegetable glycerin base, nicotine and flavoring."

Seal of approval

Alchemy is currently working on securing its USDA seal. "We are absolutely interested in USDA organic certification, considering that all of our ingredients are USDA certified and/or compliant," she says. "Our manufacturing process and laboratory were designed and developed to meet FDA [U.S. Food and Drug Administration] standards. We have been prepared for government regulation from the start. We are committed to quality and the safety of our consumers and hold ourselves

to the highest standards in regard to these areas."

One of the toughest tests to overcome in earning a USDA certified organic seal is securing nicotine that is both certified U.S. pharmaceutical grade (USP) and derived from organic tobacco. Because it is not readily available and costs significantly more, many companies use organic flavoring and VG, but nicotine derived from non-organic tobacco plants. Some argue that because the nicotine is 99.9 percent pure, the question of whether it was derived from organic tobacco plants is almost irrelevant.

O'Connell disagrees. "Some do claim that 99.9 percent USP-grade nicotine is good enough, and so it does not need to be organic. But ask a consumer whether any amount of residual petroleum solvents from conventional nicotine extraction is OK, and many consumers will say 'no,'" he says. "Like organic foods, we think consumers move from 'good enough' to 'I want something better.' And when they find something better, they don't go back."

Roessler says her company also uses pure nicotine extracted from organic tobacco. However, Alchemy differs from other companies in that the firm dilutes nicotine in its own laboratory in an organic VG base rather than purchasing a prediluted product. "It is difficult to find a propylene glycol-free version," she says. "This way, we are able to provide our customers with juice that is free from harsh substances that may cause them irritation."

Besides being hard to find, USP-grade organic nicotine is expensive, adding to the already-high cost of organic flavorings and VG. While acknowledging that VTM's products may cost more to produce, O'Connell says they are priced to be competitive with non-certified organic offerings. "The ingredient cost is higher, so the product is priced slightly higher, but that's not all bad; we are happy that American farmers are rewarded for growing our organic tobacco," he says. "Organic certification requires product traceability that you would typically see in a truly GMP [good manufacturing practices] manufacturing operation, so we undoubtedly run a higher cost structure than others in the industry. We also have demand to offer more flavors, and so we've recently completed organic certification for a line of adult-oriented flavors that we will be launching soon."

How to become USDA certified organic

To become USDA certified organic, a company must apply to a USDA-accredited certifying agent. The applicant will be asked to supply information such as:

- A detailed description of the operation to be certified
- A history of substances applied to the land during the previous three years
- The organic products grown, raised or processed
- A written "organic system" plan describing the practices and substances to be used

The organic certification process includes the following steps:

- Producer adopts organic practices and submits application and fees to certifying agent
- Certifying agent reviews applications to verify compliance with USDA organic regulations
- Inspector conducts an on-site inspection of the applicant's operation
- Certifying agent reviews the application and the inspector's report to determine if the applicant complies with the USDA organic regulations
- Certifying agent issues organic certificate

Over at Alchemy, Roessler says her company has always been committed to offering its juices at the lowest possible price, which is extremely competitive, especially when considering the company uses only the highest-quality ingredients available on the market. "Developing and manufacturing our line has been a labor-intensive process," she says. "We test and test again to be sure that every creation meets our standards where taste, throat hit and vapor production are concerned."

Alchemy has been in business for nearly three years and has expanded beyond its Southern California roots to meet the demand for its product at a national level. Alchemy is now represented in five states. VTM's Fuisz believes that growth in the organic e-liquids segment is just getting started. He also sees the USDA taking a more active role in monitoring organic labeling claims, most likely using its existing regulatory authority. And, of course, the FDA will ultimately regulate the vapor category. "Our goal is to get our products into the hands of adult smokers who want alternative products but haven't found a vapor product that works for them," Fuisz says. "Once they experience our natural, organic flavor, we're confident we're going to keep them as customers."

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