

Which Brand of Peppermint Essential Oil Should I Buy?

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It can be a daunting task...

choosing which brand of essential oil is the best purchase. There are a few questions to ask yourself, to help in deciding what to buy.

How will you be using the essential oil?

- Oils used for medicinal purposes require the highest level of quality and should be organically grown.
- Oils used for massage and aromatherapy require a high to medium level of quality.
- Essential oils purchased to make candles, soaps, and cleaners do not require as high a quality level.

Certainly, use your sniffer!

If you will be using the essential oil for aromatic pleasures, smell it to see if you enjoy the aroma. And people can certainly have a differing opinion on which scent they like. Choose the essential oils that you think smell the best, then enjoy!

Test for quality.

When you buy an essential oil, you want to know it has come from the flora indicated on the label, offering true natural remedy benefits. You certainly don't want an oil modified with synthetic chemicals that can be unhealthy! Here are a few quick ways to test for adulterations using your senses to inspect odor, color, and texture. Place one or two drops of essential oil on a paper strip. With peppermint essential oil, look for:

Odor: The menthol constituents will give peppermint essential oil a minty aroma, and it

will have a sweetness to the smell as it dries out (Lis-Balchin, 2006). A smell like alcohol could indicate an additive.

Color: It should be a clear, pale yellow, or pale green color that leaves no stain on the paper blotter as it evaporates (Buckle, 2003).

Texture: Peppermint should be thin and dry. Essential oils sometimes have vegetable oils added, which would give them an oily texture. Other extenders could include alcohol, mineral oils, carrier oils, and more (Buckle, 2003).

Also, essential oil companies should offer a GC/MS report, which will identify key constituents, and additional analyses which may include specific gravity, refractive index, optical rotation, and solubility in alcohol. Both a GC/MS as well as a MSDS (Material Safety Data Sheet) should be available upon request.

Key constituents: menthol at 20-50%, menthone at 8-31%, menthyl acetate at 2-10%, neomenthol at 2-10%, 1,8-cineole at 2-10%, menthofuran at under 5%, pulegone under 1%, isomenthone at 2-9%, and a few other constituents at lower percentages (Tisserand & Young, 2014).

Reconstituted peppermint oil may have the dimethyl sulfide removed to improve aroma (Petersen, 2015).

Specific gravity: about .900 - .907 at 25 degrees C (Petersen, 2015).

Refractive index: about 1.461 – 1.4631 (Petersen, 2015).

Most importantly, choose a brand you can trust!

Choose a company that spreads knowledge about the safe use of essential oils and

properly labels their products. Here are some additional hidden issues that can affect the quality of an essential oil:

Phthalates are toxic additives used to thin the oil and increase quantity. This chemical is found in some plastics and can be carcinogenic. If found in an oil in very small amounts, it may be a contaminant and not a deliberate adulteration (Tisserand & Young, 2014).

With contamination in mind, go organic to avoid fertilizers, pesticides, and biocides. If it is certified as organic, a product must have the official USDA organic logo as well as a 3rd party certifying body notation. If it does not have the seal, the product cannot be guaranteed organic.

Adulteration of peppermint oil with the cheaper corn mint species is common. This may be identifiable based on the menthofuran and viridifloral content (Lis-Balchin, 2006).

Shelf life of a well packaged peppermint oil is about five years. Prolonged or poor storage with exposure to light, oxygen, and heat, can cause oxidation that changes the chemistry of an essential oil, creating a higher likelihood for irritation.

Product labeling & packaging needs to include certain components. Here's what to look for in a label:

- Complete botanical (Latin) name
- Country of origin
- Part of plant used
- Extraction method
- Batch number and date
- Cultivation such as organic and/or wildcrafted
- Colored glass, integral dropper, seal
- Pure 100% essential oil
- Safety instructions such as keep away from children, etc.

References

- Buckle, J. (2003). *Clinical Aromatherapy, Essential Oils in Practice*, Second Edition. Churchill, Livingstone.
- Lis-Balchin, M. (2006). *Aromatherapy Science: A guide for healthcare professionals*. London: Pharmaceutical Press.
- Petersen, D. (2015). *Aromatherapy Materia Medica. Essential oil monographs*. American College of Healthcare Sciences.
- Tisserand, R. & Young, R. (2014). *Essential Oil Safety*, Second Edition. Churchill, Livingstone, Elsevier.

Organoleptic Testing Results

Eight brands graciously participated in our test, donating bottles of their essential oil and providing GC/MS reports. Aromatic impressions were performed by placing a few drops on a scent strip and assessing after 30 seconds, and again, after about ten minutes. Company packaging, websites, and GC/MS reports were also reviewed.

Brand	Price	Is It Organic?	Country of Origin	Aroma / Testing	*Company Information
Ananda Apothecary	\$1.50 per mL	Certified Organic	Bulgaria	Excellent	Excellent
doTerra	\$1.835 per mL	Not Indicated	No country of origin listed	Good	Fair
Gurunanda	\$0.533 per mL	Not Indicated	India / USA	Excellent	Good
Nature's Gift	\$0.867 per mL	Organically Produced	Hungary	Excellent	Excellent
New Directions	\$0.203 per mL	Certified Organic	India	Good	Good
Purify Skin Therapy	\$0.503 per mL	Certified Organic	India	Excellent	Excellent
Rocky Mountain Oils	\$1.263 per mL	Certified Organic	No country of origin listed	Excellent	Excellent
Stillpoint Aromatics	\$1.33 per mL	Organically Produced	S. Africa, India, England	Excellent	Excellent

*Company Information includes: website, packaging, brochures, sales reps, etc.

Ananda Apothecary offers an affordable organic brand with the lowest toxic constituent content of pulegone and menthofuran compared to all other tested brands (each below 0.1%). It also has the highest % of menthol, offering a first impression that was mildly sweet, somewhat fresh, yet strongly menthol. After the dry down, the aroma seemed less sweet but maintained a sharp menthol note.

doTerra has strong brand recognition and market share. With a strong sales focus, marketing safe oil use is not always in line with NAHA and AIA standards. First impressions of the oil found it to be a strong, medicinally sweet aroma, reminiscent of peppermint candy. After the dry down, it maintained the strong candy-like aroma but did take on a slightly softer, minty note. This oil contains the second lowest amount of menthol of the tested oils and is also low in menthone.

Gurunanda is an affordable oil, available at Walmart, and has a lower menthol and menthone content than most other tested brands. It offers good quality for the price. Some information found on the packaging and company website are not in line with NAHA or AIA safety and usage guidelines. The aroma at first was a powerfully sharp scent that then had an impressive dry down that was much softer with sweet and herbaceous notes.

Nature's Gift is owned by a well-known and respected "vintage" aromatherapist, with a website that contains a noteworthy amount of information regarding all avenues of aromatherapy. The first impression of this oil was sharply cool, refreshing, and slightly sweet when first applied to the scent strip. After the dry down, it had a vibrant balance of sweet, fresh, and menthol aromas.

New Directions is the most affordable oil tested and offers the organic seal. According to the GC/MS report, it has the lowest menthol content of the eight oils and is one of the highest in pulegone and menthofuran content. As a first impression, the aroma was candy-like, very sweet, and somewhat pungent when applied to the scent strip. After the dry down, the aroma remained strongly sweet but did become less tenacious with a slight herbal note. Its texture was the oiliest of those tested.

Purify Skin Therapy is owned by a highly educated newcomer to the essential oil market who is finishing up an MS in Aromatherapy, and is dedicated to offering ethically-produced, organic products. First impressions of this organic oil found it strongly camphoraceous. After the dry down, the aroma became herbaceous, slightly sweet, with a still-strong but not over-powering menthol component. This particular oil contains the second highest amount of menthol of those in the analysis.

Rocky Mountain Oils is a reputable oil provider to educated aromatherapists. At first, its oil's aroma was lightly menthol, and less sweet than most of the peppermints, yielding a complex and balanced array of notes when first applied to the scent strip. After the dry down, the aroma was very faint, and seemed to have the quickest evaporation rate of all the oils, a good indicator of the quality of this organic peppermint.

Stillpoint Aromatics is a company owned by two well-respected certified aromatherapists. Both former teachers, they also offer AIA and NAHA approved courses. Three oils were tested from three countries:

- South Africa's had a quite sharp, camphoraceous note when first applied to the scent strip. After the dry down, the aroma became milder, yielding still strong but quite minty and cool notes.
- India's aroma started off clear and highly mobile, with a very potent camphor note and a touch of a sweet and herbaceous scent. It dried down with a continuously strong minty aroma that warmed and sweetened slightly.
- England's was softly camphoraceous, cooling, and slightly sweet at first, then dried down to a balanced, vibrant, and slightly softer version of the first impression.

% of Constituent	Ananda	doTerra	Gurunanda	Nature's Gift	New Directions	Purify	Rocky Mountain	Stillpoint (England)
Menthol	54	38.26	40	41.32	31.53	43.43	33.73	43.59
Menthone	21.93	27.74	22.57	23.67	26.73	22.48	24.86	23.16
Isomenthone	7.79	3.67	2.95	3.71	4.43	3.58	4.22	4.24
Isomenthol/neoisom.	2.91	3.25	3.13	2.55	7.47	3.37	1.24	3.31
Eucalyptol	5.37	5.47	4.55	5.34	5.29	4.27	5.1	4.26
Menthol acetate	6.97	6.56	4.17	3.93	4.68	4.30	6.01	4.08
Caryophyllene beta	0.65	1.58	2.00	2.58	2.00	2.19	3.19	2.09
Limonene	-	1.93	1.66	2.40	2.70	2.30	2.96	1.98
*Pulegone	0.71	1.2	1.61	1.77	1.94	1.77	1.28	1.40
*Menthofuran	-	2.66	3.71	3.56	4.02	3.49	3.32	1.72

*According to Tisserand & Young (2014), look for a low menthofuran and pulegone content.