



Palm Wax Education



# ECO PALM WAX IS THE HEALTHIEST AND MOST ENVIRONMENTALLY FRIENDLY CANDLE ON THE MARKET



## Palm oil that presents no threat to rain forests or orangutan ecosystems . . .

Years ago, Aloha Bay® decided to never source palm wax from any area where rain forests are destroyed and ecosystems threatened. To counter any possible allegations, we stopped using any palm wax from Indonesia, period, even though much of the palm oil in Indonesia comes from ancient, traditional palm plantations.

## Extensive research by independently funded conservationists confirms:

- The main culprits for rain forest destruction are loggers (and governments), not farmers.
- Most deforestation is, initially, a result of logging for profit. Often, logging companies will pose as planters, promising economic growth for a region, so they can purchase “clearing” permits from government officials. But once the valuable timber is collected, they vacate the lands.
- Trees were removed not to clear the land for crop planting but because the governments profited from the sale of the timber, first by selling “planting” concessions, then by taxing the exports of hardwood.



### Daabon Plantation, Colombia

USDA organic and fair trade certified by Rainforest Alliance (RA) independent seal of approval ensures that the palm oil was grown and produced in compliance with strict guidelines protecting the environment, wildlife, workers, and local communities.

### Agropalma Plantation, Brazil

USDA organic and fair-trade certified by EcoSocial. Guaranteeing transparent commercial relations, fair prices, premium pricing, profit sharing, medical benefits, worker safety, agricultural, water resource management, solid residues management, environmental protection and preservation.





# SUSTAINABILITY = WHY WE CHOOSE PALM WAX

- Highest yielding oil crop in the world, producing 6 times more oil per hectare than any other plant and 10 times more than soy.
- 1 acre of palm trees can provide the same quantity of wax as 20 acres of soy.
- Plantations have year-round ground cover to protect the soil from erosion and traditionally require little or no pesticides.
- Production does not involve heavy equipment: The soil does not get as compacted like it does with annual tillage (seeding, spray, weeding) of soy crops.
- Palm trees sequester carbon and encourage biodiversity .
- Palm trees require very little water .
- Small family owned tree farms account for over 30% of palm oil production.



**P**erennial palm trees: no yearly tilling of soil

**A**ncient tree crop: GMO free & pest resistant

**L**ess Machinery means more rural employment and no soil compaction

**M**ore oil per acre: 10x more than soy and the oil makes twice as much wax



# NEGATIVE PR CAMPAIGN ABOUT PALM OIL - FUNDED BY U.S. SOY PRODUCERS

The American agro industry is a huge producer of soy and has invested millions to mislead consumers about palm oil because they feel threatened by the import of less expensive, healthier, and more sustainable tropical oils. They also hoped but failed to corner the biodiesel market. Slander campaigns against tropical oils started in the 1950s, when the agro industry tried the public to switch to “healthy” margarine made of hydrogenated sunflower- , corn- and soy oils.

Soy brokers and commercial agro-conglomerates funded environmental and advocacy groups to create false allegations

They created ‘Heartsavers’, an alleged non-profit health group that criticized palm as being unhealthy and unfit for human consumption. Medical researchers disproved their claims. And now after that, new research brings into question soy as a super health food.

When the negative PR attack failed, soy producers blamed palm tree farms for destroying native forests. Pot calling the kettle black!

Greenpeace exposed the biggest soy brokers like Cargill, Archer Daniels Midland, and Bungee for clear cutting ancient trees in Brazil’s rain forests. The restaurant chain McDonalds subsequently pressured them into establishing an unprecedented two-year moratorium on the purchase of any soy from newly deforested areas in the Amazon.

Even Rainforest Action Network (RAN), who attempted and failed to get US retailers and manufacturers to ban palm oil, has now admitted that all recent clear cutting has been from the same soy agricultural conglomerates and not palm tree plantations.



**ALL SOY WAX IS MADE USING MONSANTO GMO SEEDS: REQUIRING A VARIETY OF FERTILIZERS, HERBICIDES AND PESTICIDES.**  
**THERE ARE NO SMALL FARMS PROVIDING NON-GMO SOY**





# CANDLE ART & SCIENCE -

## HOW WE MAKE THEM & HOW YOU SHOULD BURN THEM

- What determines how well or long a candle burns is not the type of wax used but the quality of the wax and how the candle is engineered.
- The size of the wick determines the burn times -- not the wax
- Candles using all types of wax can be designed to burn clean, as long as the wax is free of contaminants like dust or ash.



When a hydrocarbon chain molecule in candle wax is heated, its molecular structure breaks down. In the hot flame, these particles become incandescent and glow, giving the flame its luminescence. A flickering flame usually means there is not enough heat to evaporate the carbon (soot) particles, which have a positive charge and clump together around negatively charged airborne particles. The airborne soot particles eventually collide with water molecule, cool and stop glowing. This flocculation creates a snowball effect until the resulting charged clumps are too heavy to float. They fall and stick by electrostatic attracting to everything in sight. This black soot can stain walls, draperies, furniture, and get sucked into central cooling ducts.

A great burning candle can be made with any of the waxes by engineering a jar opening wide enough to get sufficient air around the wick, braiding the right size wick for each candle type and adjusting the fragrance load and color so they don't clog the wick.



- The best way consumers can prevent a good burning candle from creating black soot is to keep it out of drafts and clip the wick.
- A draft causes the flame to flicker.
- Soot can also occur when a flame exceeds 1 inch in length.
- Keep the wick trimmed to avoid such a high flame.
- Claims that soy wax burns cleaner or longer are inaccurate.
- Claims that only beeswax candles give off negative ions are silly.



# SYNTHETICS VS NATURAL WAX

Manufacturers of candles are misinforming consumers about what is 100% natural. Some paraffin candles claim to be “natural” because paraffin is extracted from crude oil which is a “natural” product! Soy wax is synthetically (chemically) derived using hexane to leach or wash (extract) the oil from flaked oilseeds. There are no sources of organic certified soy wax. Most soy and paraffin candle makers use additional petrochemical solvents to achieve maximum scent load and ultraviolet light stabilizers to prevent their candles from fading. Aloha Bay uses vegetable derived carriers and the new natural dyes don’t fade so we don’t use any synthetic additives.



Aloha Bay Palm Wax is made from 100% palm oil and no other wax



Beeswax has to be deodorized and bleached to add scent and color. Beeswax burns best if it remains untreated



SOY wax candles are most often a blend of soy, palm, paraffin, and beeswax



Paraffin is a petroleum byproduct. It is the sludge left over after processing diesel. Synthetic co solvents can be added to paraffin to effect fragrance throw and or prevent the colors from fading in ultraviolet light. Crude oil is not a renewable resource. We believe burning a petroleum product in your home, is not a good idea. To burn a kerosene heater (with an open flame) in your home is strictly prohibited. A paraffin candle, after all, is nothing but a tiny crude oil based “heater”.

- None of the 4 US soy wax suppliers we contacted recommend using 100% soy wax
- 100% soy pillars or tapers cannot be made because the wax is too soft
- If you’re going to use a soy blend you might as well use paraffin because all soy blends are over 50% paraffin and more expensive.
- If you’re going to add scent and color to a beeswax candle you might as well use palm wax or a soy blend
- Palm Tapers are about 1/2 the price
- Boxed Palm Tapers take up less room than hanging tapers
- Palm Tapers won’t bend like beeswax tapers when the ambient temperature is high



# SYNTHETIC SCENTS VS NATURAL SCENTS



Brokers who claim that their scents “all contain essential oils” are misleading buyers. Almost any blend can contain some small amount of pure essential oil, while all the other ingredients are synthetic.

Competitor companies who claim that their scents are “all natural” advertise them online as “perfume blends” with essential and natural oils.” They admit that their candles are made mostly with pure essential oils and small amounts of “nature identical scents” which are actually synthetic scents. Independent lab tests reveal these “mostly natural” candles to be more than 95% synthetic. Unless the manufacturer can prove through documentation that they use 100% pure essential oils and plant extracts, these products are mostly synthetic

## Industry Break Through - 100% Natural Fragrance

Aloha Bay pioneered a new technology, using 100% pure botanical extracts, to re-create fragrances that, up till now, could only be produced using synthetics. We are the first to have a 100% natural vanilla candle. Using the same 100% natural technology, we can now approximate floral, fruity and sugary fragrances.



### Some facts – You’re probably smelling a synthetic:

- Most fruit scents such as mango, guava, papaya, fig, pineapple and coconut
- Floral scents like lilac, gardenia, lily of the valley, orange blossom and pikake
- Sandalwood, rose, and jasmine are too expensive to make from 100% essential oils
- Fantasy scents like lotus, amber, musk, fresh rain, etc.



# FRAGRANCE AMOUNT = HOT & COLD THROW

Bart Burger, our CEO, is a master candle maker with over 25 years experience blending all types of wax. He continues to find that natural palm wax and essential oils are highly polar (compatible) whereas synthetic paraffin and soy wax are non-polar with essential oils. The essential oils will not go completely into solution, tending to “sweat” out of the candle wax or settle out at the bottom of the candle jar.

We’re discovering that natural waxes (palm & beeswax) are more compatible with natural dyes and scents. Synthetic wax (paraffin & soy) works best with synthetic scents and dyes.



- **Palm Wax and essential oils are the most compatible because they are both steam distilled virgin oils**
- **We hand pour Palm Wax Candles with as much as double the concentration of essential oil compared to soy, beeswax, and paraffin candles**
- **Paraffin wax throws the best with synthetic scents**
- **Soy blends work best with synthetic scents because they are both chemically derived**
- **Beeswax blends fine with low concentrations of pure essential oils and synthetics**

Fragrances need to be designed to release from the particular wax that is being melted. This is referred to as throw. Cold throw is how the candle smells unlit on the shelf. Hot throw is how strong the candle scent is when the candle is lit and forms a wax pool.

Some natural food retail buyers say “I don’t want to bring in a lot of candles because they cold throw too strongly.” Synthetic scented candles put out a lot more fragrance sitting on the shelves than pure essential oil scented products. Most retailers want candles that do not smell up their store but when lit throw out strong fragrance.

With Palm Wax Candles™ that exactly what you get. Pure essential oils dissipate on the surface of the candle because of their volatility. Pure essential oil candles do not smell strongly sitting on the shelf. However, when the candle is lit and the wax and fragrance dissolve, the full fragrance accord throws strongly. With synthetic fragrances, which are usually “stickier” and far less volatile, the hot throw and cold throw are about the same.



# NON TOXIC CANDLE DYES

Oil soluble dyes used to dye most candles are called aniline dyes. Aniline dyes are petrochemicals and should be treated with respect. When we were using them our staff needed protective gloves, eyewear and a mask to protect them from inhaling the powdered dye. Some authorities class aniline as a carcinogen, although the IARC lists it in Group 3 (not classifiable as to its carcinogenicity to humans) due to the limited and contradictory data available.

European research indicates that candles containing toxic chemicals emit those chemicals when they burn. Aniline can be toxic by inhalation of the vapor, absorption through the skin or swallowing. It causes headache, drowsiness, cyanosis, and mental confusion, and, in severe cases, can cause convulsions.



R.E.A.C.H = European Community Regulation on Chemicals and their safe use that deals with the Registration, Evaluation, Authorization, and Restriction of Chemical substances. The new dyes contain none of the 26 prohibited aryl amines by the German Safety group.



- ★ Contain NO aromatic amines or solvents like toluene, xylene, benzene or naphtha
- ★ The dyes are dissolved in a vegetable oil base, with NO petroleum solvents
- ★ NO ingredients are tested on animals
- ★ NO aniline dyes
- ★ NO phthalates
- ★ NO hazardous solvents or toxic materials of any kind are mixed with the dyes

The dye manufacturer also offers this guarantee: "These dyes, whose formulation remains proprietary, are eco-friendly. We do not use solvents, but instead an ingredient which is FDA approved for food contact, and pharmaceuticals. All pertinent health and safety information has been provided per the US Code of Federal Regulations."



# AROMATHERAPY BENEFITS

Since there are NO U.S. regulations concerning aromatherapy, manufacturers of personal care, wellness, and hygiene products use the term to market products that contain synthetic fragrances. However, certified and clinical aroma therapists claim that synthetic fragrant chemicals don't have the same therapeutic benefits. Preliminary scientific evidence is growing in all these areas, but without U.S. clinical trials it's impossible to say what does and does not work. Aromatherapy Candles is a great way to benefit from the therapeutic influence of pure essential



- The Palm Wax™ used in the candles comes from the orange part of the fruit. A palm oil-enriched diet does not raise the level of LDL or total cholesterol, and may even lead to lower plasma levels of LDL, the plasma cholesterol most commonly linked to heart disease. Palm fruit oil increases 'good' HDL, compared to other saturated oils, such as soy and coconut oil that increase 'bad' HDL. Palm fruit contains valuable vitamins and nutrients that our bodies need and that promote cardiovascular health.
- Eco Palm wax candle scents are from pure essential oils and a new technology Aloha Bay pioneered to create the Vanilla Bean, Cranberry, and Rainforest as 100% natural scents. These natural isolates are vacuum distilled from the botanical extracts of the fruits, nuts, bark, or leaf of the organic plants.
- Eco Palm Wax contains no synthetic petrochemical additives or co-solvents. Palm oil is a steam distilled essential oil just like other essential oils it has therapeutic benefits and highly soluble with all essential oil scents.
- Aloha Bay uses therapeutic grade essential oils in scents which have not been altered or diluted. All perfume blends, even if they contain some essential and natural oils, are 95% synthetic fragrances.





# ALOHA BAY'S BRIGHT ECO IDEAS:

## REDUCE

- Each year we reduce waste by 15%. All the best ideas come out of our monthly staff and factory meetings.
- Minimal consumer packaging and labeling, featuring the colorful wax and hand poured designs, not elaborate packaging.
- Our inventory tracking system ensures that we make only what we need, to get orders out within 3 - 5 business days, never over producing and having to sell off old inventory.



## RE-USE

- The cardboard boxes the candles come in from our Indonesia factory are re-conditioned and used as shipping boxes for US retailers.
- All shipping peanuts and bubble wrap we receive from suppliers goes to a local business that sells products on EBay.
- Reject salt crystals go to the local feed store and horse breeder to be used as salt licks.
- We reuse all the unscented colored wax by pouring layers of colors of wax into jars and selling them through our outlet store here in Lower Lake, CA.



## RECYCLE

- We separate all our cardboard, plastics, and glass to fully participate in recycling programs that sort material by type of commodity. Our PET #1 recycled votive tray are sent to a recycling center in St. Helena where they are compressed into bales and sold to Eckman Recycling to be reused in making more PET # 1 plastic products.
- New compostable packaging is from 100% consumer recycled cardboard.
- All our display fixtures are made from Rainforest Alliance certified Smartwood



# WHO BUYS ALOHA BAY CANDLES?



- 60% female
  - Cuts across a wide age group:  
42% over 40, 15% 30-45, 43% under 30
  - About average income
  - Least price sensitive
  - Extremely brand loyal
  - Wants to ensure a safer environment
- Protect and conserve natural resources
  - Contribute to non-profits Industry educated consumers on the web and through blogs
  - Very influential on the buying decisions of family and friends
  - Entertaining at home and/or creating a home spa environment
  - Familiar with products containing harmful petrochemicals, natural cleansers, bath & body products, the hazards of indoor air pollution
  - Purchase from companies that are authentic and “real” and see through green washing (disingenuously spinning products and policies as environmentally friendly)



LOHAS = Lifestyles of Health and Sustainability. They are consumers who are well educated about the issues concerning health, the environment, social justice, personal development, and sustainable living. The holistic world view of the LOHAS consumer is a belief in the interconnectedness of global economies, cultures, environments, and political systems. As well as the interconnectedness of mind, body, and spirit within, in order to achieve full human potential.

MAKE A  
green  
choice



Choosing naturally occurring products, is important to our health, but it's even more important for the health of our planet. For example, mid west consumers in the U.S might want to support their local soy farmers, so maybe they buy soy candles. What they don't realize is , there are no small independent farms left, so they are basically supporting Monsanto, Cargill, and Archer, Daniels, and Midland who are committed to:

- Commercial farming that uses heavy equipment that is compacting our soils
- Annual tillage of the soil that is scares away indigenous wildlife
- GMO soy, fertilizer, herbicides, pesticides
- Intensive crop irrigation which is depleting our regional water resources
- Global corporations, not individual local farmers



# ALOHA BAY SUGGESTS: CHAKRA ENERGY CANDLE LINE

## OUT SELLS ANY OF OUR OTHER LINES 2 TO 1



**NEW - Top Selling**  
**Product Recommendation:**  
**100% Essential Oil**  
**Chakra Energy Jar 11oz**

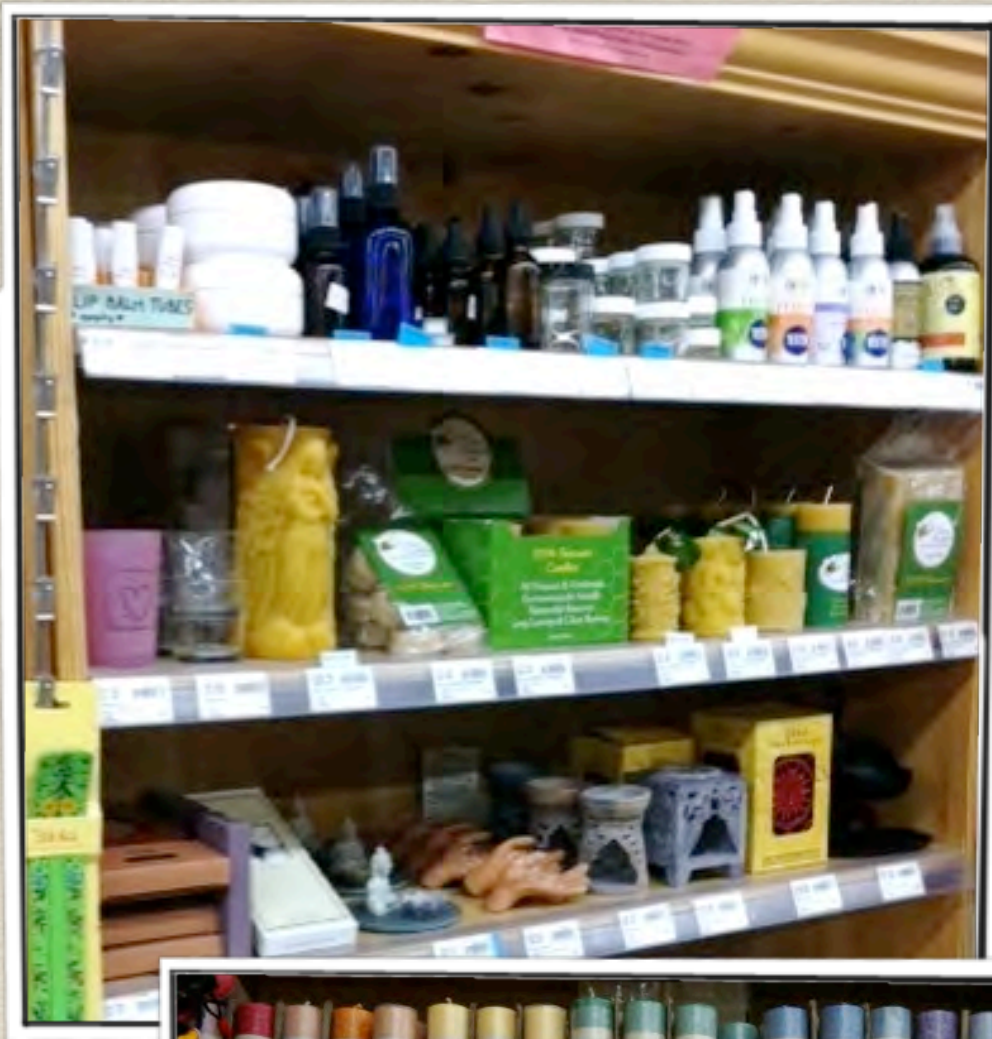


**NEW** Product Recommendation:  
**100% Essential Oil Chakra Energy Votives 2oz & Small Rainbow Jars 2.5oz**  
**2 Tier Smartwood Votive Display PrePack**



**NEW - Top Selling**  
**Product Recommendation:**  
**100% Essential Oil**  
**Chakra Energy Pillars**  
**7 Slot Smartwood Pillar Display Pre Pack**





VS



How we recommend the top selling product be displayed

Candle products in existing stores