



FAQs: Candles

What is the difference between scented and unscented candles?

Fragrances added to candles are known to emit harmful volatile organic compounds (VOCs). In addition, the fragrance oils soften the wax so that the candle does not burn cleanly, and thus, more black soot is emitted than is released from unscented candles, which can damage homes, furnishings, and human health. Soot particles can travel deep into our lungs, exacerbating respiratory illness and disease. They also contain phthalates, which can damage many organs in the body, as well as benzene and toluene which are known carcinogens. Thus, if candles must be purchased, un-scented versions represent the safer choice. However, keep in mind that candles, whether they be scented or unscented, still represent a fire hazard.

Is it OK to use unscented candles?

Burning unscented candles can also contribute to poor indoor air quality. Most commercial candles are made with paraffin wax which is a petroleum product—a byproduct of oil refining. When burned, paraffin candles can release benzene, toluene, formaldehyde, acetaldehyde, and acrolein, as well as black soot, into the air. It is best to opt for safer alternatives to paraffin-based candles, and to take certain precautions before and during their use.

How can I minimize indoor air pollution from candles?

- Burn only beeswax, soy, or palm oil candles, which burn cleaner and longer than those made with paraffin wax. They are generally also nontoxic and non-allergenic, and beeswax is naturally fragrant.
- Avoid scented candles.
- Ensure the wick is the correct size for the thickness of the candle. Avoid wicks that are too thick, and those with a metal core that keeps the wick upright. In older candles and in some imported candles, this metal core may contain lead. It is best to opt for pure cotton, braided wicks that curl over when burned. The wick should burn down evenly with the wax.
- Avoid multiple wick candles.
- Trim the wick to ¼ inch before lighting.
- Don't burn your candle in a narrow mouth container, which will cause unsteady air flow or increase flicker. Candles poured into glass jars or ceramic containers can often be problematic.
- Cease burning any candles that leave sooty residues on candle holders or surrounding surfaces.
- Increase ventilation in rooms where candles are burning, while avoiding direct drafts on the candles.
- Extinguish candles after one or two hours of continuous burning and allow them to cool before re-trimming the wick and relighting.

What are VOCs?

Volatile organic compounds (VOCs) are substances containing carbon and different proportions of other elements such as hydrogen, oxygen, fluorine, chlorine, bromine, sulfur, or nitrogen; these substances easily become vapors or gases. A significant number of VOCs are commonly used as solvents (paint thinners, lacquer thinners, degreasers, and dry cleaning fluids).