

## What you need

Beeswax: rendered or pearls



Double boiler or large container for melting

3 lb yard rent jugs work great for melting, pouring, and storing. Counter top cooker with temp control will also work. Stay away from cast iron and copper.



Mold

Wick and bobby pins

Mold release. Also, candle gloss/seal, color chips, scents

Thermometer and scale

Candy thermometer works great. Inexpensive kitchen scale.



## Wicking tool

Large eye darning needle or make your own with a thin hanger or wire



Spoon, ladle, paring knife

Freezer paper

Wax side up. Use to keep your counter top clean. And, any spilled wax can be easily gathered for re-use.

## Preparation

Cover work area and floor. (Cured beeswax can be cleaned off counters and kitchen floors with a scraper, hairdryer, paper towels, and elbow grease, but why make a mess if you don't have to? Don't do this over carpet.) Have all your tools together, and prepare your molds.

Beeswax is sticky, and a mold release should be used. Use a non-silicone release. Lightly spray inside of mold. (Too much mold release will buildup.) When using Candle Flex molds, **note the "T" pin on the bottom of each mold. T pin is marking the hole the wicking will go through. (I don't think we include pins anymore)**. Use a wicking tool to wick the mold. Leave extra wicking out the bottom. Then each time a candle is removed, the mold gets re-wicked. Some molds are split to make removal easier. Split molds use rubber bands to hold seam, so make sure your seam is aligned. A bobby pin will hold the wick centered over the mold. For thin molds, place inside larger, stable container, using paper towels if need be to keep upright while pouring and curing.



## Melt Beeswax

Make sure bottom pan has sufficient water, but not so much that it will overflow. Put wax in top of double boiler or in melting container, and place on/in bottom pan. Turn on heat. **Do not leave**

**wax unattended.** Wax will take some time to melt. Don't let your bottom pan go dry. Beeswax will start to melt around 140F. If using a double boiler, check your candy thermometer for proper temp. You're pouring between 150-160F. Don't let your wax go above 170F. Excessive heat will darken wax. Never let wax boil. If using a yard rent jug, keep your water temp between 180F and 200F. (Think poach or simmer.) A wooden spoon through the handle will keep it on top, preventing wax from entering. You'll know when the wax is ready to pour. It will be relatively clear and flow easily.

### Pouring Beeswax & Curing

Once your beeswax is melted, it's time to add color or scent. Turn off heat. If using a double boiler, ladle melted wax into pouring pot. Your yard rent jug is ready to pour, just wipe dry after removing from water.



Pour melted wax into mold. Allow to set a little. Then fill any shrinkage holes with more hot wax. Use a toothpick to open and widen holes. This might need done a few times.

Slow cooling is best. Rapid cooling will result in distorted candles with cracks. Be patient. Large molds and metal molds will need to set overnight. Before un-molding, make sure mold and wax are cool to the touch. Remove cured candle accordingly.

### Useful tips

Keep a journal of things like wax melt temp; wick size used; and how many color chips are used for 3 lbs of wax.

Wick size charts are approximates. Consider them as suggestions for starting experimentation.

Ideally, properly sized wick consumes wax at the same rate it melts. This won't always happen, and some excess melted wax will build up around the candle base.

Make sure inside of mold is clean and free of particles that can discolor your candle.

Clean molds every 20 or so uses with hot soapy water. We use Dawn dish soap and a soft cloth. Most brushes are too stiff, and can damage flex molds.

Having trouble extracting a metal mold? Put it in the freezer for 15 minutes.

Don't worry about the whitish residue that will eventually coat a candle. Wax bloom is easily removed with a blow dryer or buffing with a soft cloth (nylon stocking works good).

When coloring beeswax, one color chip is used for 1 lb of wax. Use more for a more vivid color. Remember, most beeswax is yellow so adjust your color chip to compensate. If you want a pure color, you'll need to use white beeswax pearls. Yellow wax can be bleached with peroxide.

Scenting candles? A little scent goes a long way. Besides a too strong scent, adding more scent oil than needed can also cause burning problems.

#### Burning problems and possible solutions

Burning in a draft will cause one side to burn faster than the opposite. The low spot will allow wax to drip and run out. If practical, eliminate the draft. Otherwise, avoid a large draft. A small draft can be compensated for. To even out burning, rotate candle a quarter or half turn every ½ hour or so.

Wick position is important. Failure to center wick causes one side to burn faster, similar to burning in a draft.

Keep wick trimmed to ¼". A too long wick will have a larger flame, producing more heat, and melting wax faster than it can consume.

Wick drowning can happen when the wick is too small for the wax, which is melting faster than the flame can consume it.

Wick drowning can happen when the wax is too soft for the wick size. This usually means too much honey in the wax. The wax can either be rendered again, or you can try larger wick.

A flickering flame with little or no wax pool means you're using a wick that is too big. The flame is consuming wax faster than it is melting, and eventually runs out of wax. Try using a smaller wick.

Carbon mushroom buildup on cored wicks is unavoidable. Cored wick should only be used with containers, floater molds, and molds without wick holes. If you're using braided wick and getting carbon mushroom, the wick is too big for the candle.



Example of carbon mushroom:

Container candles can trap heat as they burn. You might see a different burn at the beginning of the candle's life than during the second half.

Votives are container candles without a container, not miniature pillars. They're designed to liquefy quickly and are great scent throwers. A votive must be burned in a container. The tighter the fit, the longer the burn.



Horizontal line or lines at the bottom of the candle usually means wax was poured to a lower level than the previous pour or pours.

Many horizontal lines, fairly close together, indicates a wax temp that was too low. The slower flowing wax trapped air against the mold wall. Wax eventually flows to the wall and solidifies. This slower flow causes a series of lines to appear, and is commonly accompanied by air bubbles.