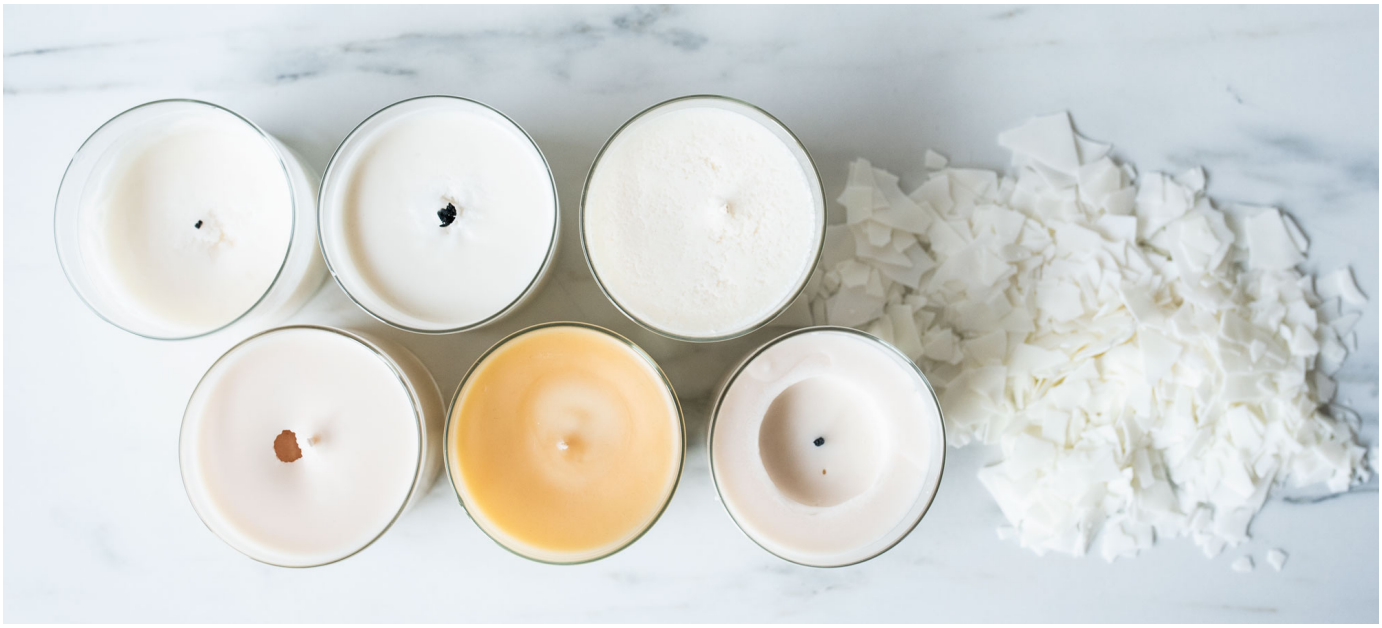
Soy Wax Troubleshooting Guide

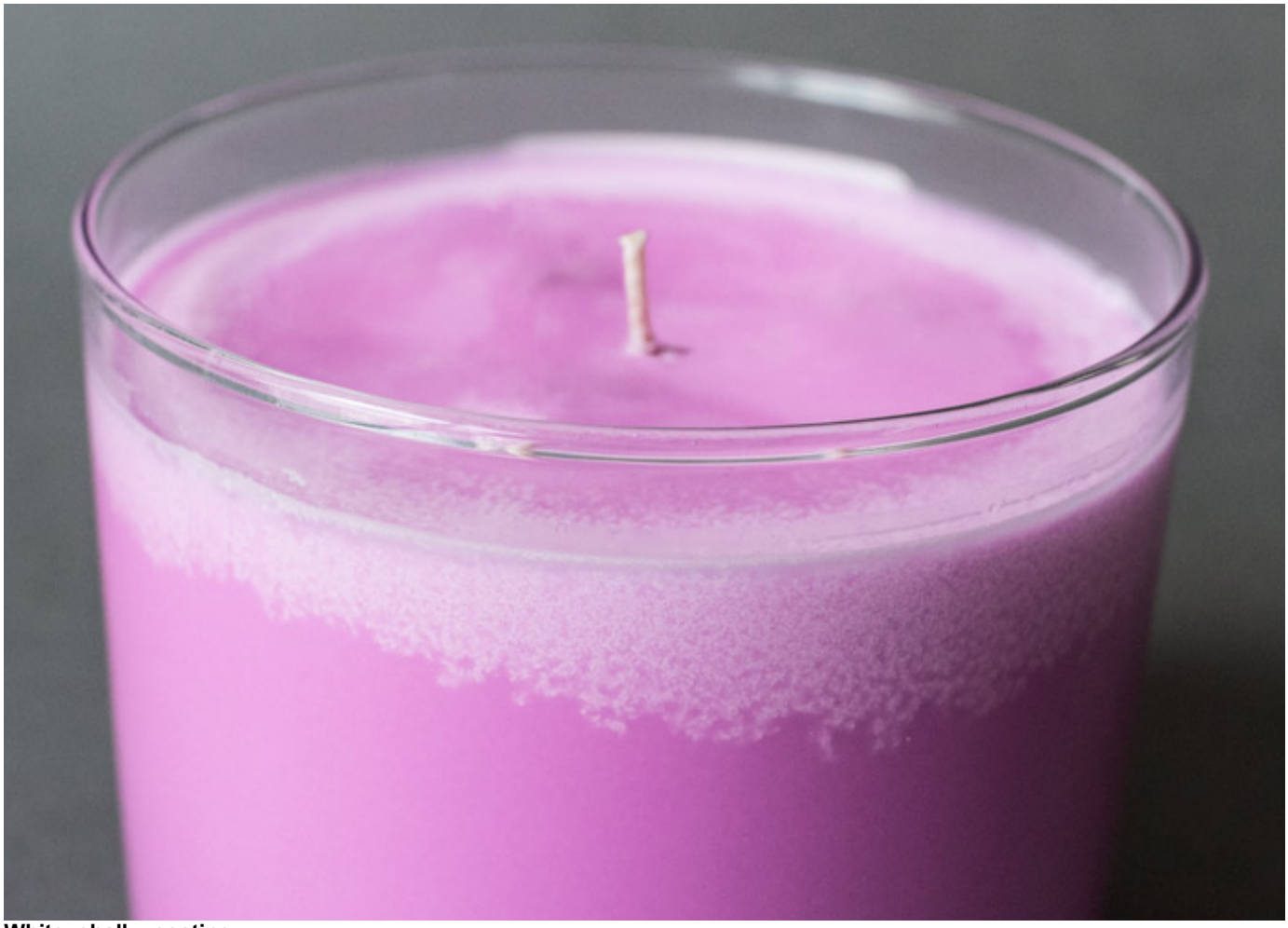
If you have any question or problem with our molds, please feel free to contact us: support@silicando.com

SOY WAX TROUBLESHOOTING GUIDE



You've made your soy wax candles, but they don't look quite right. What went wrong? How do you fix it? Is it normal? Don't worry, we've got you covered. We've compiled the most common issues you might encounter making soy wax candles, and have plenty of recommendations to get you right back on track.

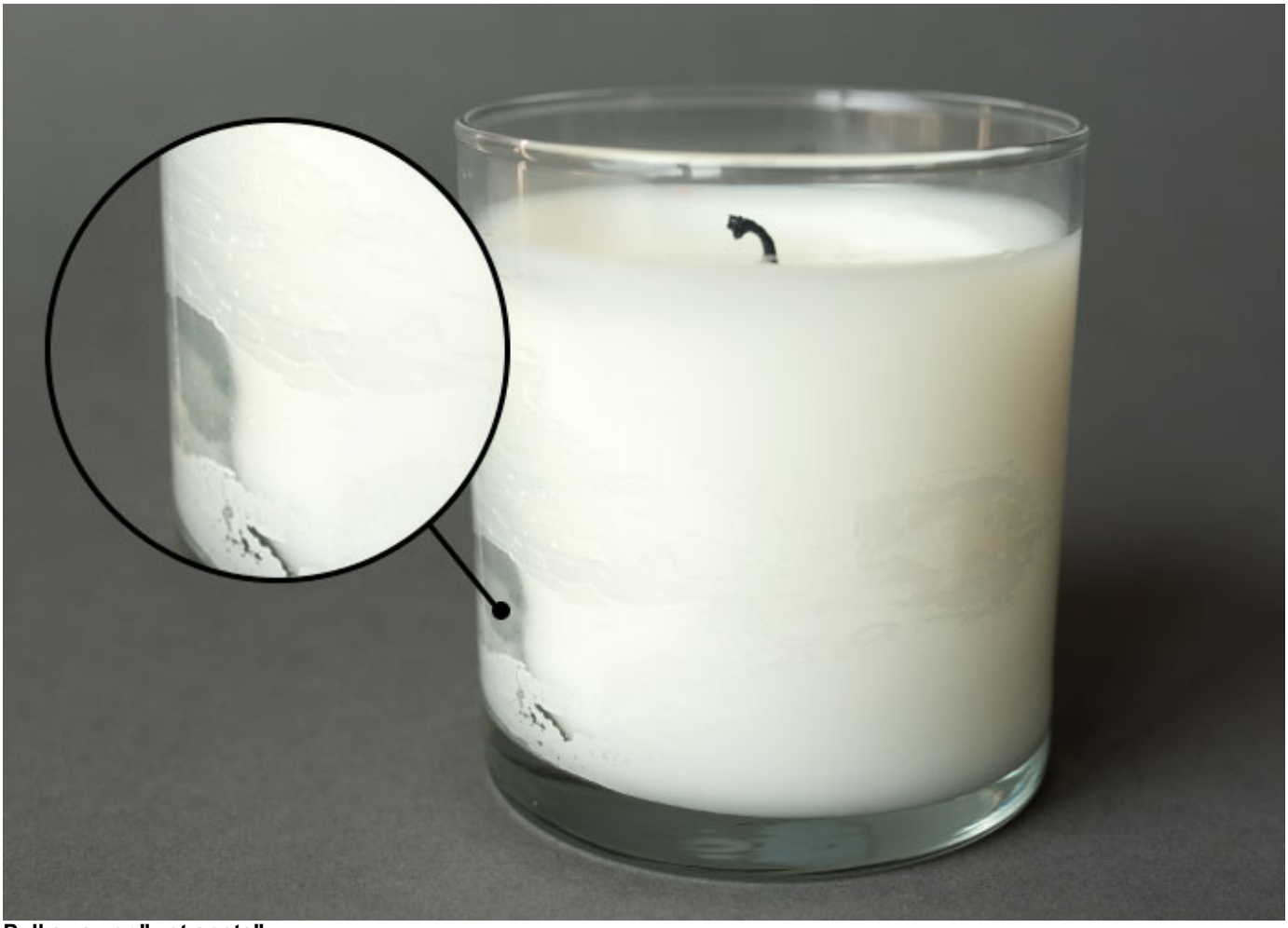
Browse through the thumbnails, identify your specific soy wax issue, and click on the photo to jump to troubleshooting recommendations.



White, chalky coating

The white-ish chalky coating that can show up on the tops and sides of your finished candles is commonly known as frosting.

Let's Troubleshoot ❯



Pull away or "wet spots"

The wet spots that you see are not really "wet spots." The spots are caused by shrinkage and air bubbles that occur as the wax cools.

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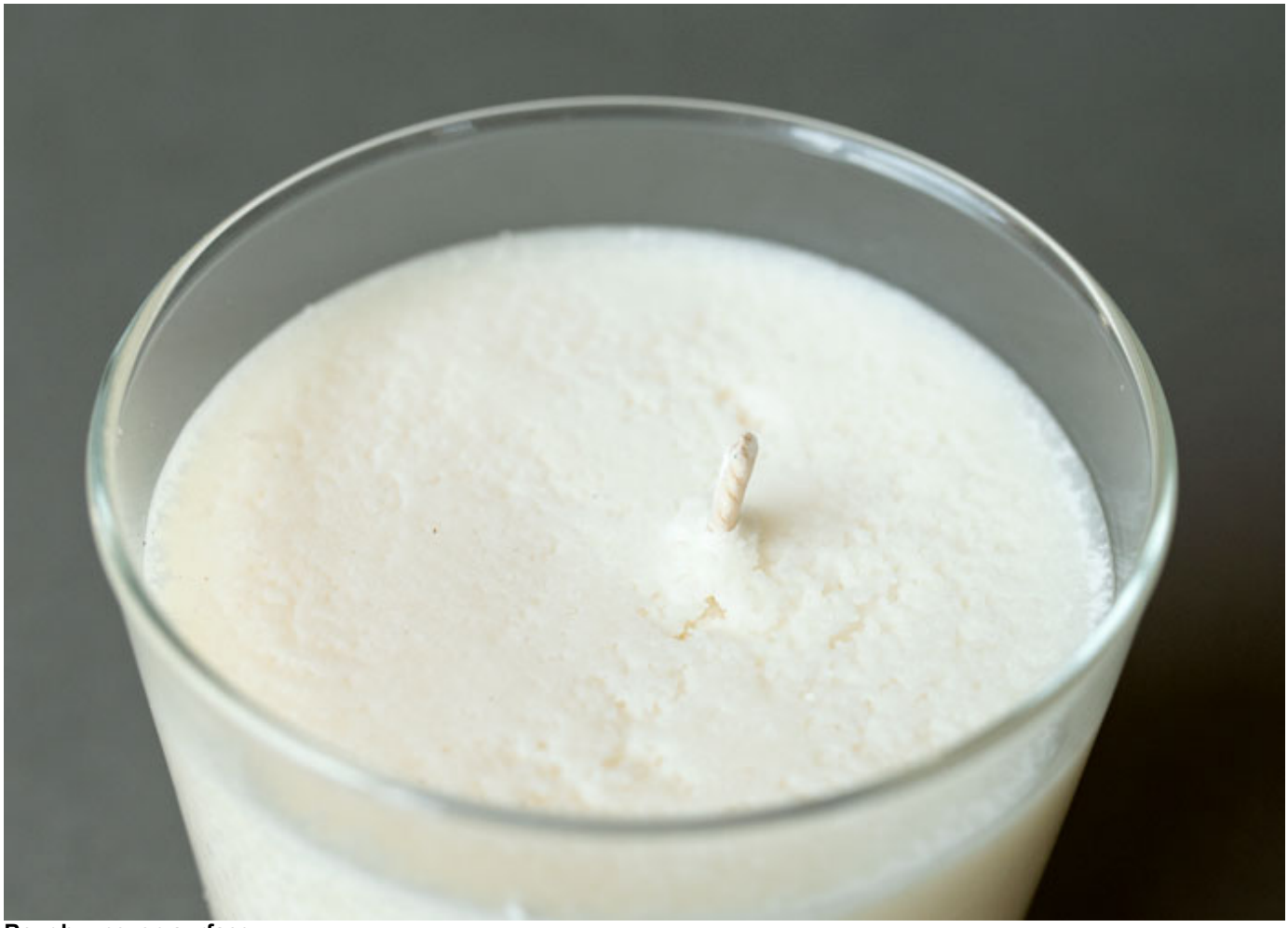

Rough, uneven surface

Common for even experienced candle makers, a rough top is caused by air escaping out of the top surface of the wax.

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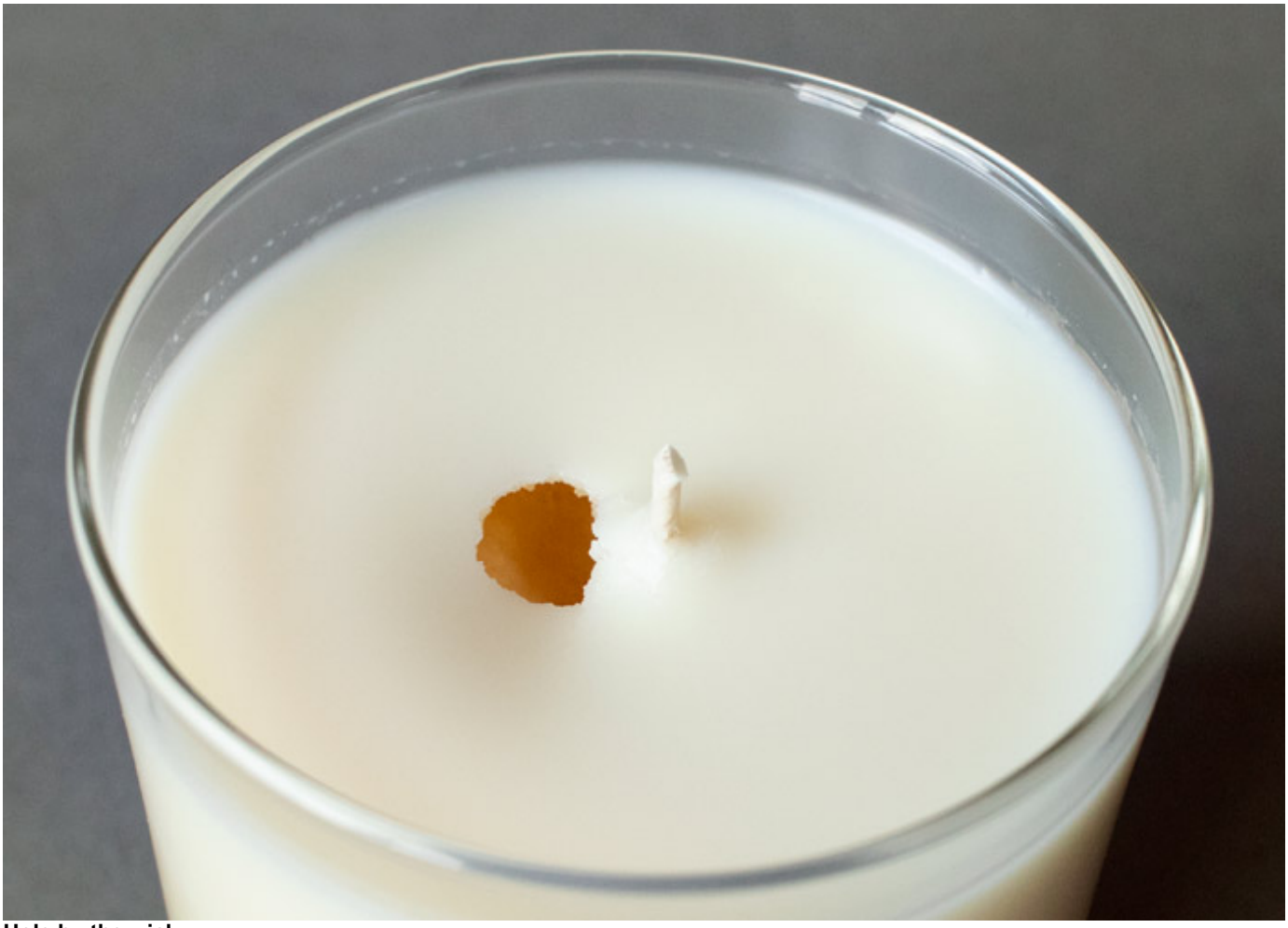

Hole by the wick

Cracks or little holes can form on the top of your newly poured candles, caused by air bubbles trapped in the wax.

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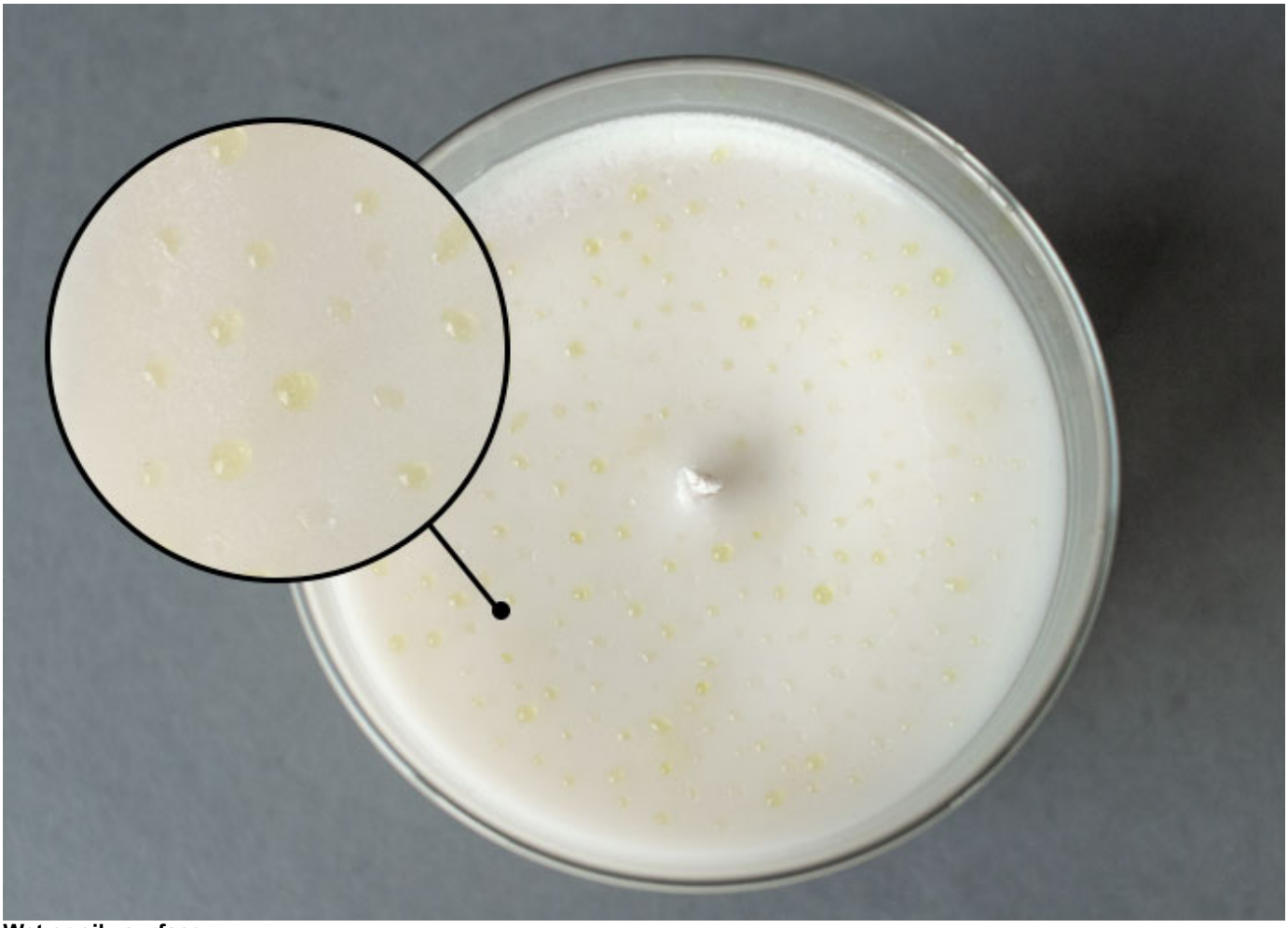
Rough tops after burning

A common trait of all soy waxes, caused by the melt pool cooling unevenly when the flame is blown out.

Learn More ❯



Wet or oily surface

Fragrance leaching, "seeping," or "bleeding" is usually a sign that the fragrance has not bonded with the wax, or too much fragrance was used.

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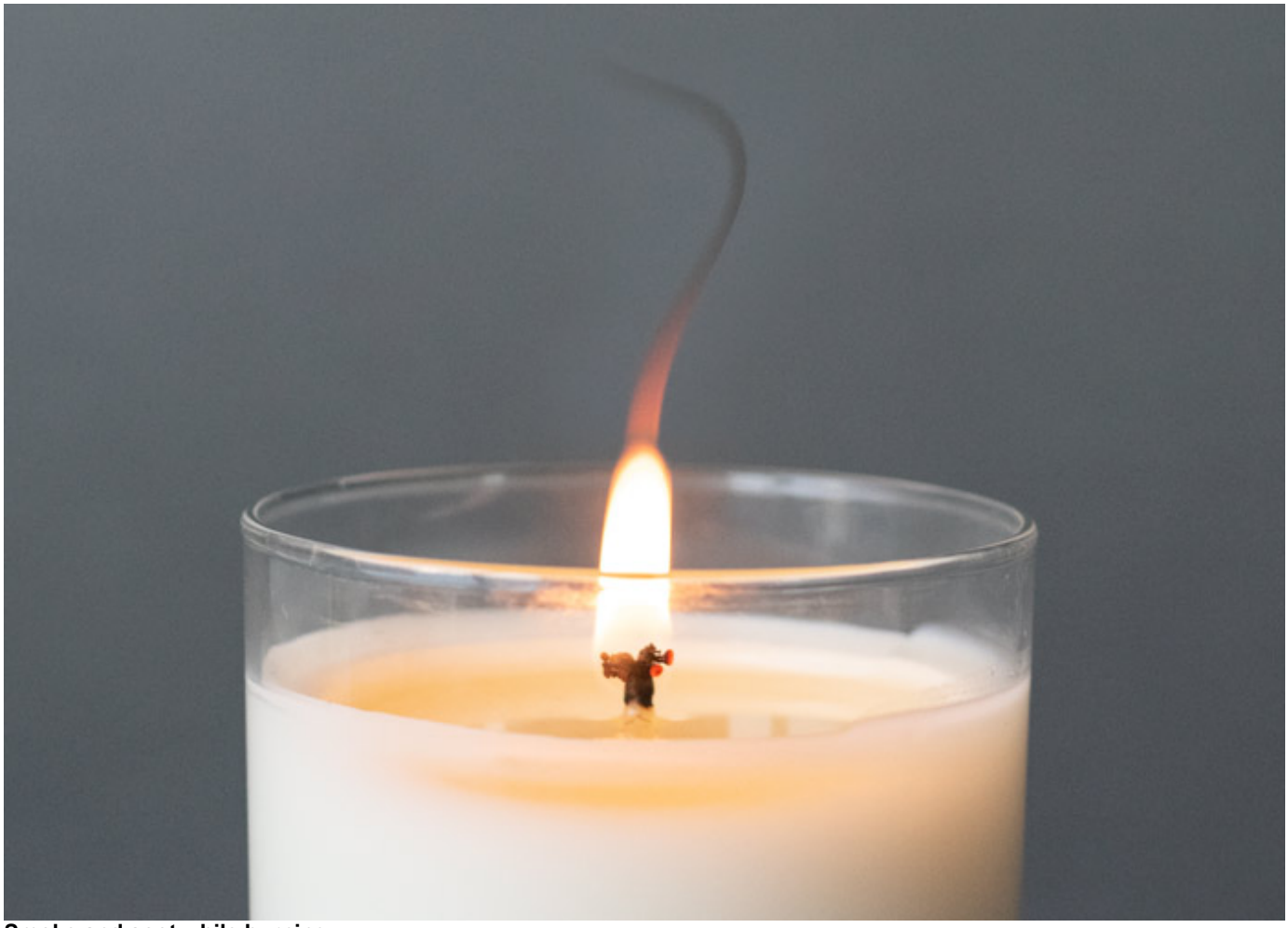

Smoke and soot while burning

Visible dark smoke coming from the flame can be a sign that the wick is too large for the candle, or there is an excessive amount of fragrance and/or dye in the candle.

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Tunneling

What is known as "tunneling" is a sign that the wick size is not large enough for your candle.

Let's Troubleshoot ❯

Small melt pool

A small melt pool shows that the candle is under wicked, meaning the wick size is too small for the candle.

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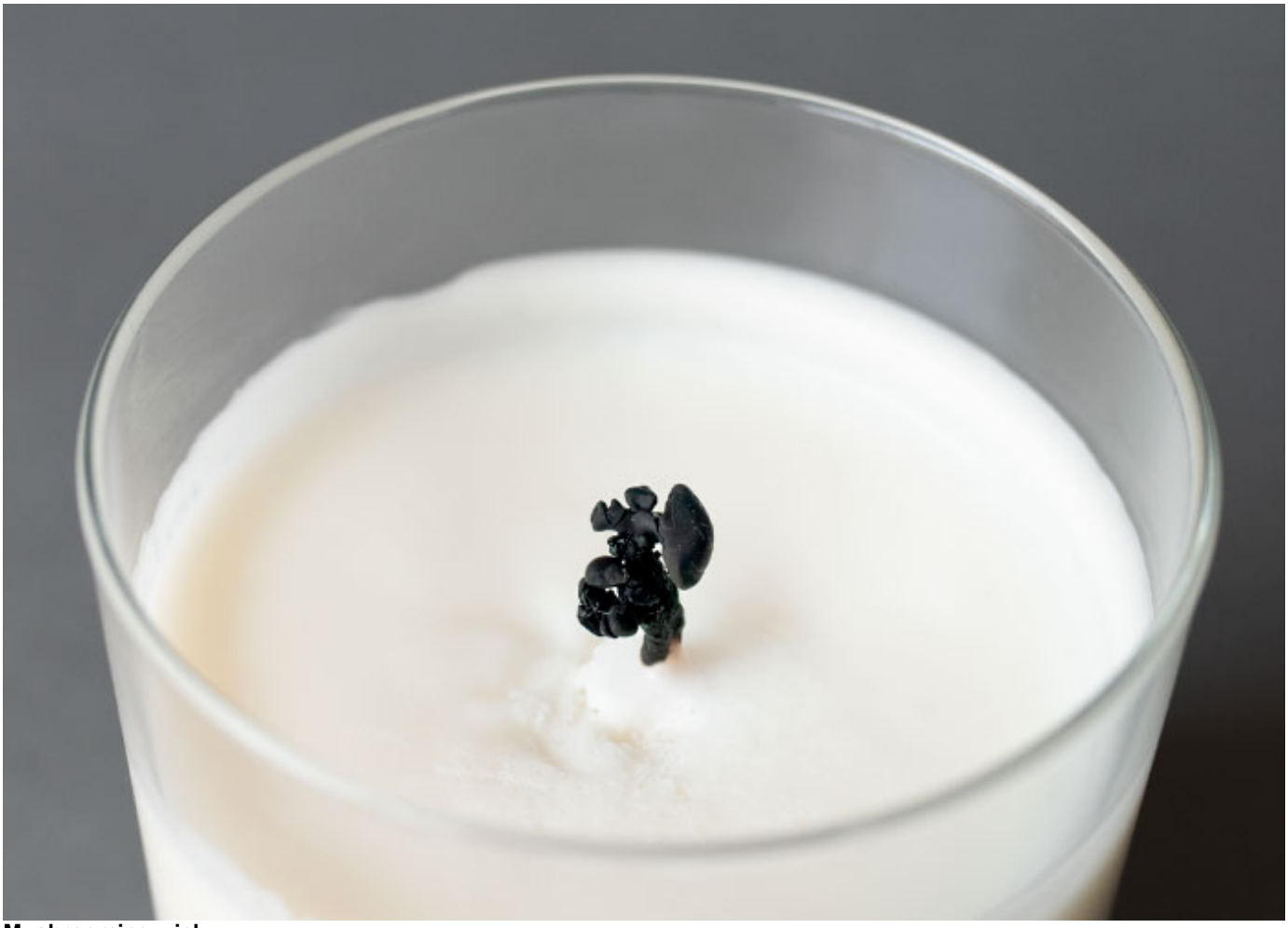

Mushrooming wick

The "mushroom" shape formed at the end of a candle wick after burning is the result of carbon buildup.

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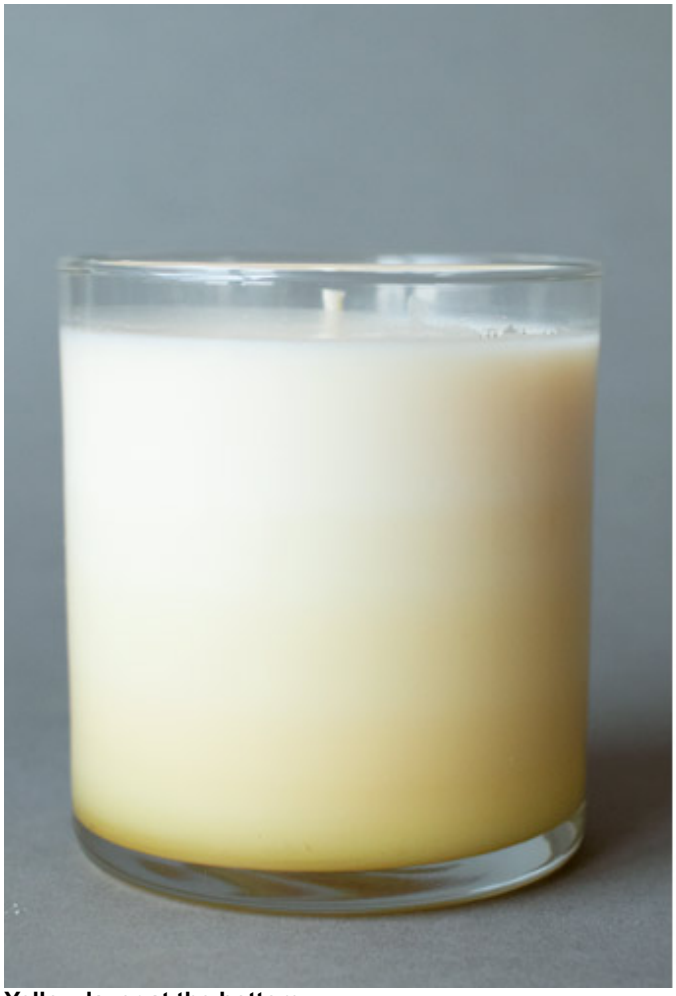

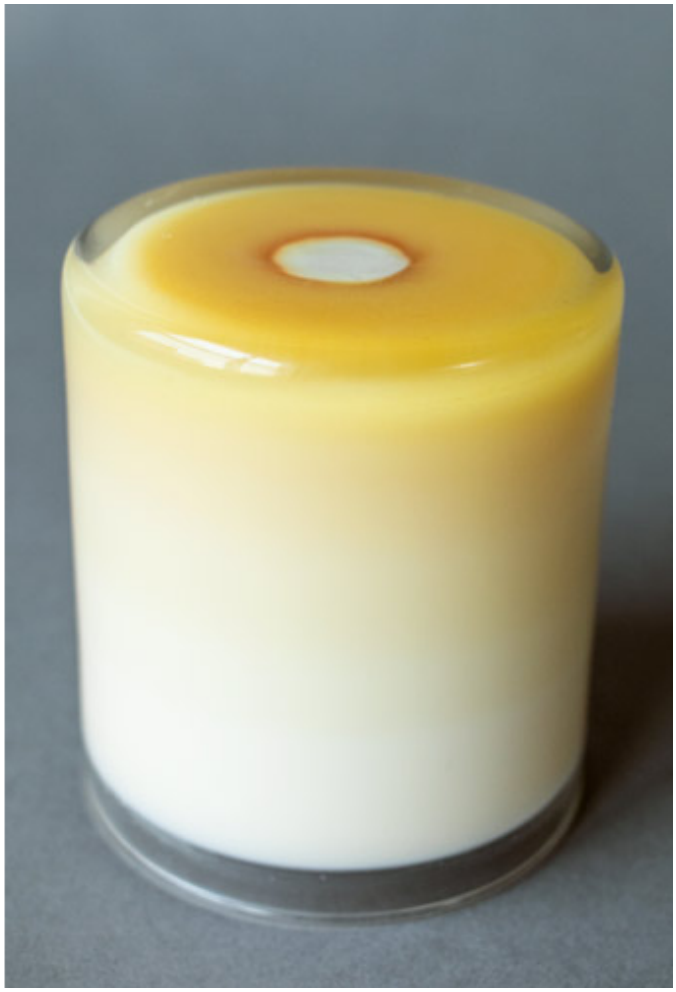

Yellow layer at the bottom

Fragrance can settle at the bottom of a candle if it does not completely bond with the soy wax, causing a yellowish discoloration.

Let's Troubleshoot ❯

Clumpy, oily wax

When soy wax is exposed to excessive heat, moisture, or has a high oil content it can become soft and clump together.

Find Out More ❯

Air bubbles in melted wax

On occasion, additional air can get incorporated in the wax during the manufacturing process.

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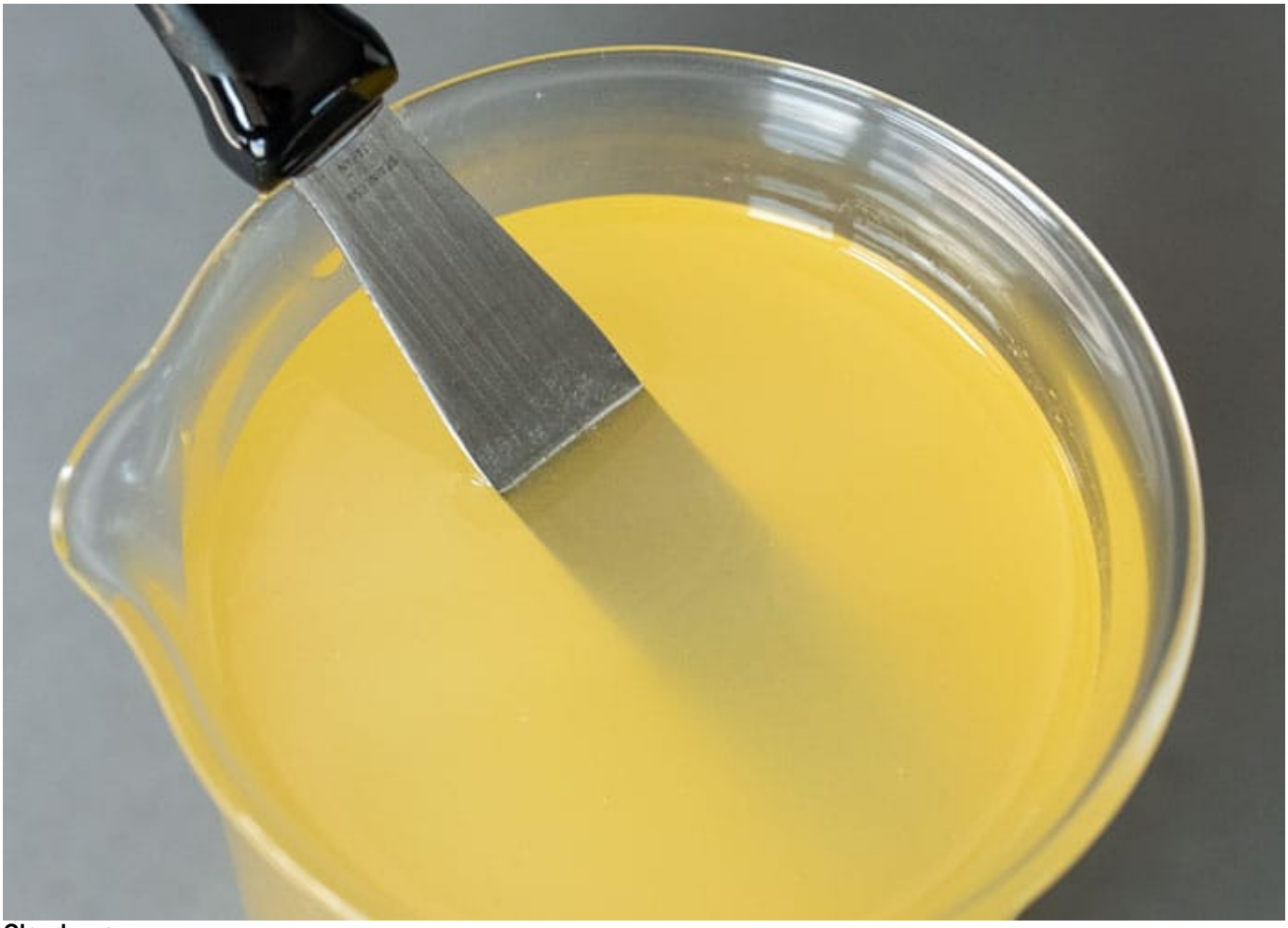

Cloudy wax

Cloudy wax is typically a sign of additional moisture and air that on rare occasion gets incorporated into the soy wax during processing.

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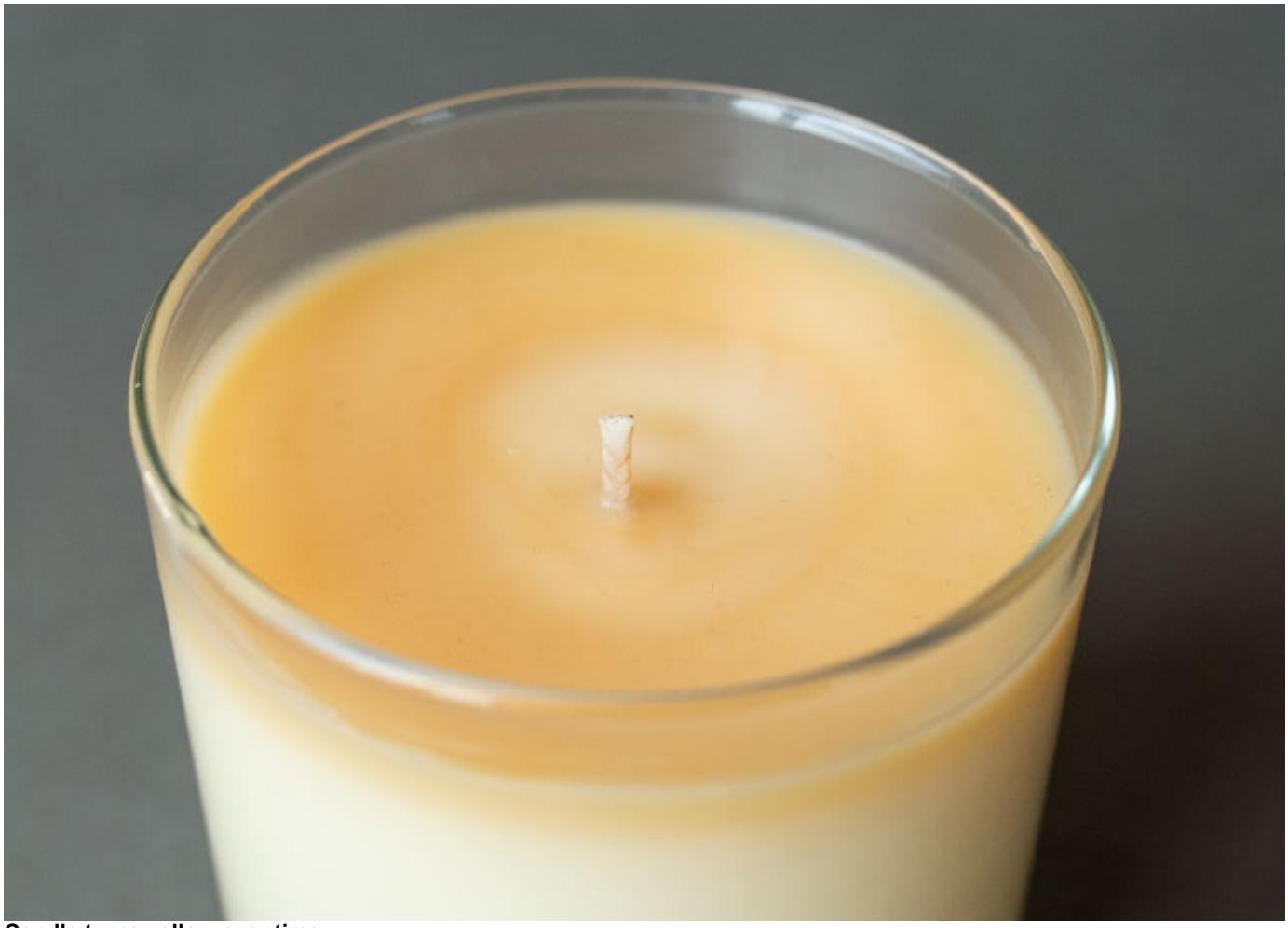

Candle turns yellow over time

Natural ingredients in fragrances, like vanillin and cinnamon, can cause your candles to discolor over time.

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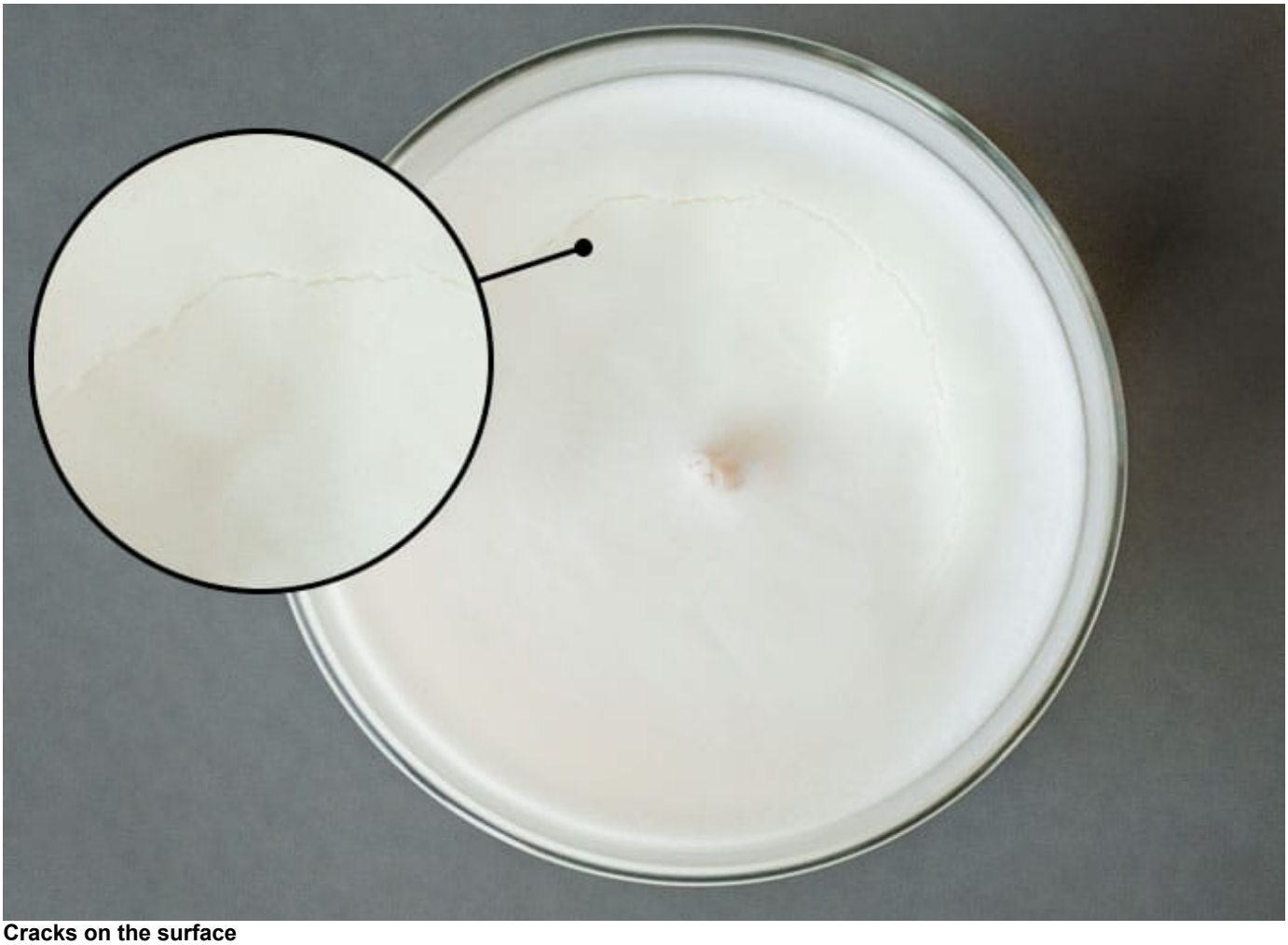

Cracks on the surface

Cracks can form on the top of your newly poured candles, caused by air bubbles trapped in the wax.

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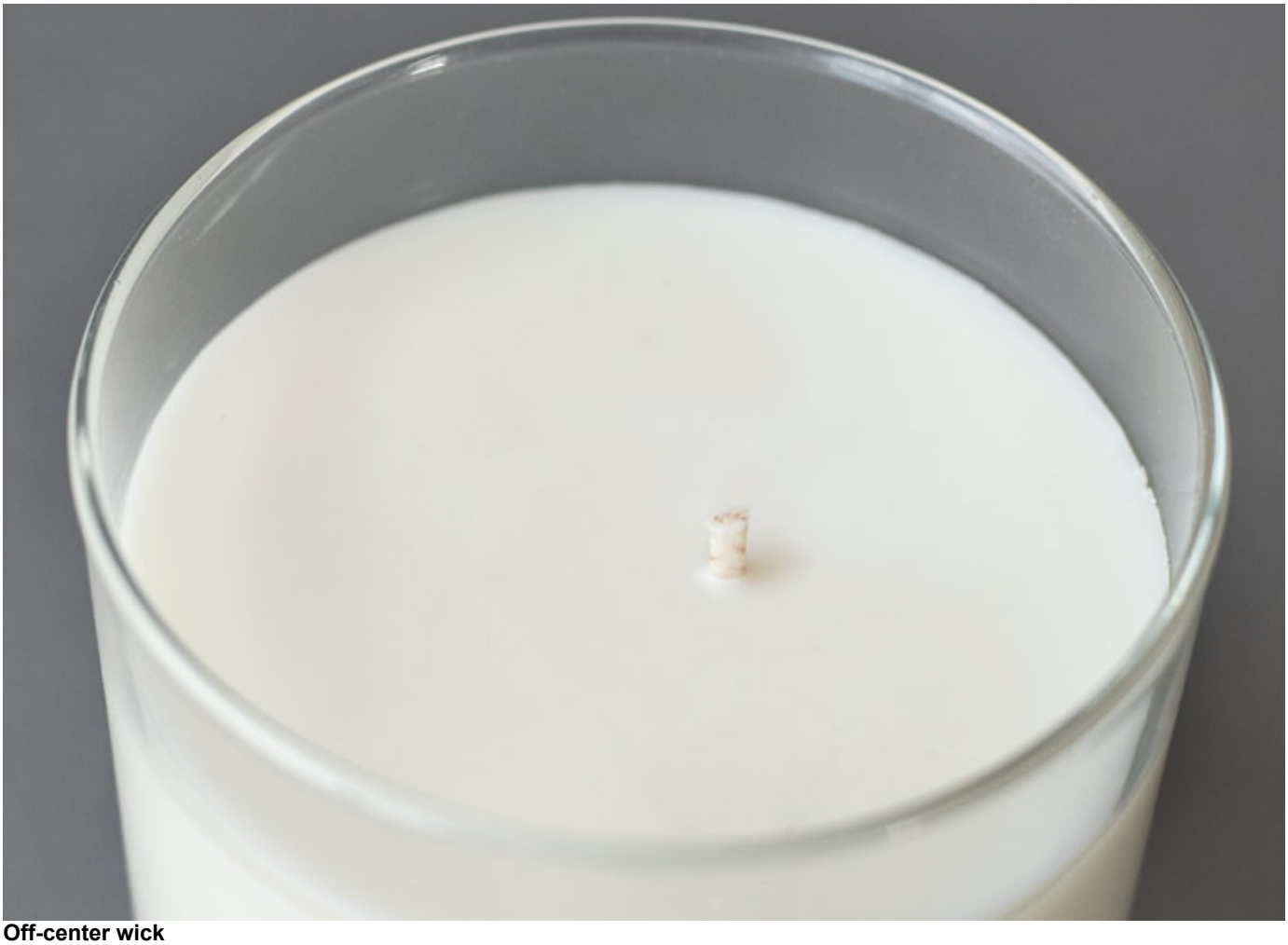

Off-center wick

The wick can move off-center in the container if it is not tightly set when the poured wax cools.

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List View

Each of the common soy wax issues are listed below with details about what causes the problem and some helpful tips for troubleshooting. If you want to read more about a helpful tip, just click on the plus sign (“+”) to expand the section.

Frosting

Frosting is a byproduct of a natural wax, and is caused by the growth of tiny crystals on the surfaces of the wax. All soy wax will frost over time, but luckily frosting is solely an aesthetic issue and does not affect the way your candle burns or smells.

Mix melted wax less vigorously... +

Preheat your glassware... +

Pour at a lower temperature.. +

Let your poured candles cool more slowly... +

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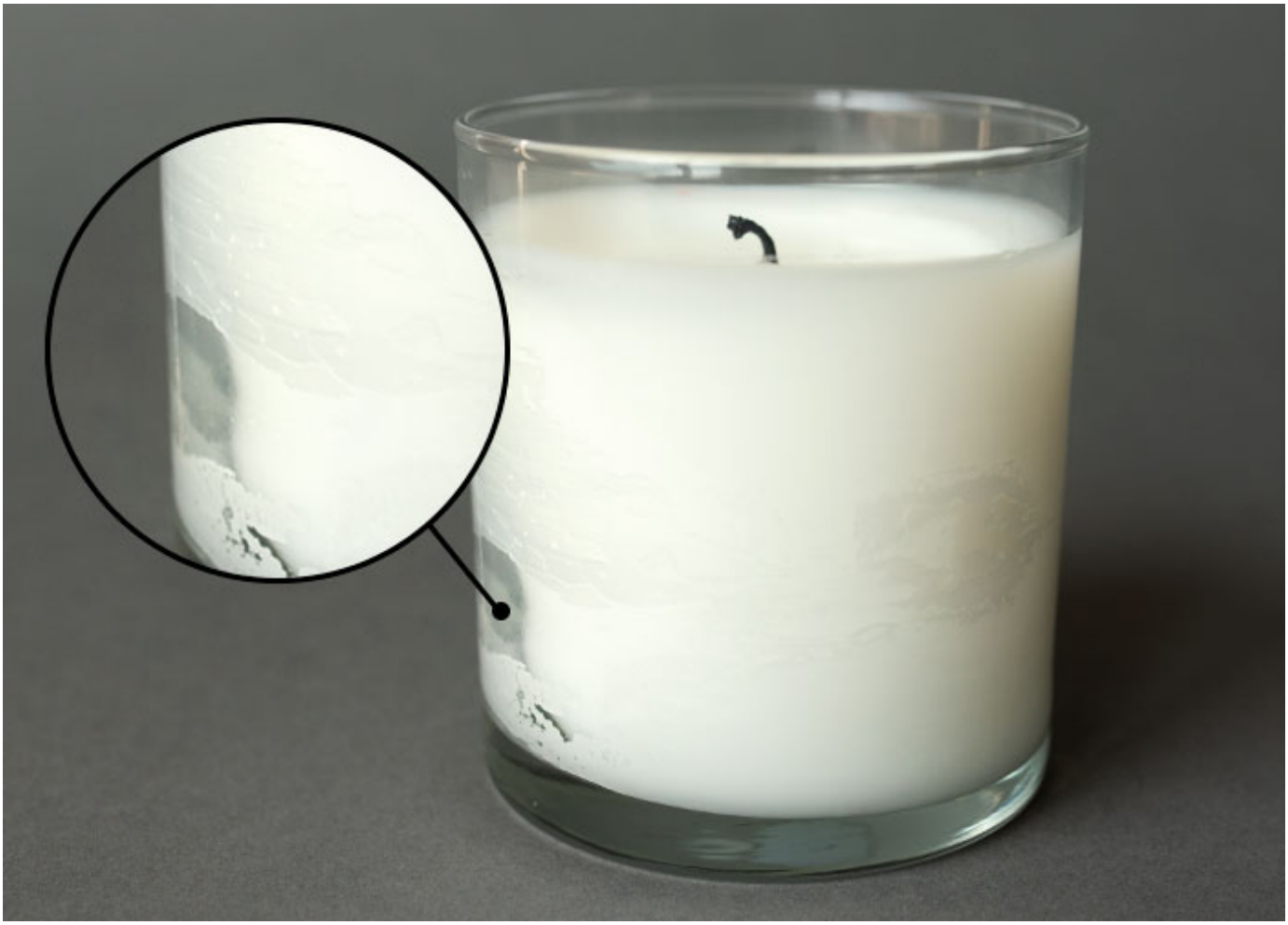

Wet Spots

What can appear to be wet spots on the sides of your candles are not really wet spots, but rather places the wax has pulled away from the container as it cools. It is caused by the wax cooling faster in some areas than others. Part of the wax pulls away from the glass while the remainder adheres to the sides of the container. This is the most common glass adhesion issue for container candles. It does not affect the way your candle performs, and can be easily hidden by a label. To help avoid wet spots in your next batch try the steps outlined below:

Clean and preheat your glass containers.. +

Pour the wax slowly into the containers... +

Space candles out to help them cool slowly and evenly... +

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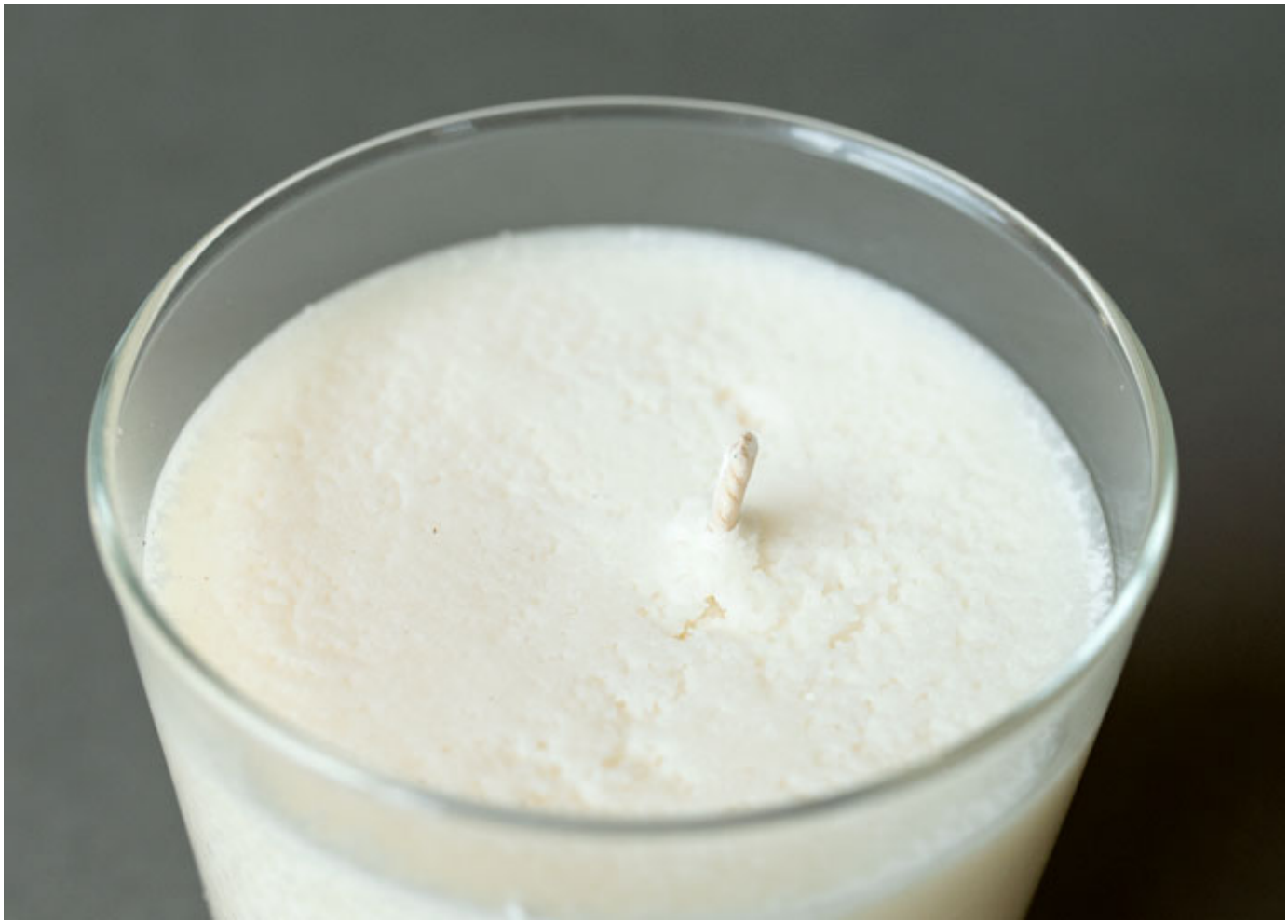

Rough Tops

It can be frustrating to see a rough, unattractive surface on your cooled candles. The good news is: you aren't alone! Rough and uneven tops are an incredibly common occurrence when working with soy wax. As your poured candles cool, the wax naturally begins forming solid crystals. Ideally, these crystals are nice and uniform, giving the wax that smooth, creamy appearance soy is known for. But if the wax cools too quickly, too slowly, or contains small air bubbles, the surface of the wax will have a very mottled or pitted finish. Don't stress! There are several steps you can take to prevent and remedy these imperfections:

Avoid over-stirring... +

Adjust your pour temperature... +

Cover the imperfection with a layer of wax... +

Re-melt the surface with a heat gun... +

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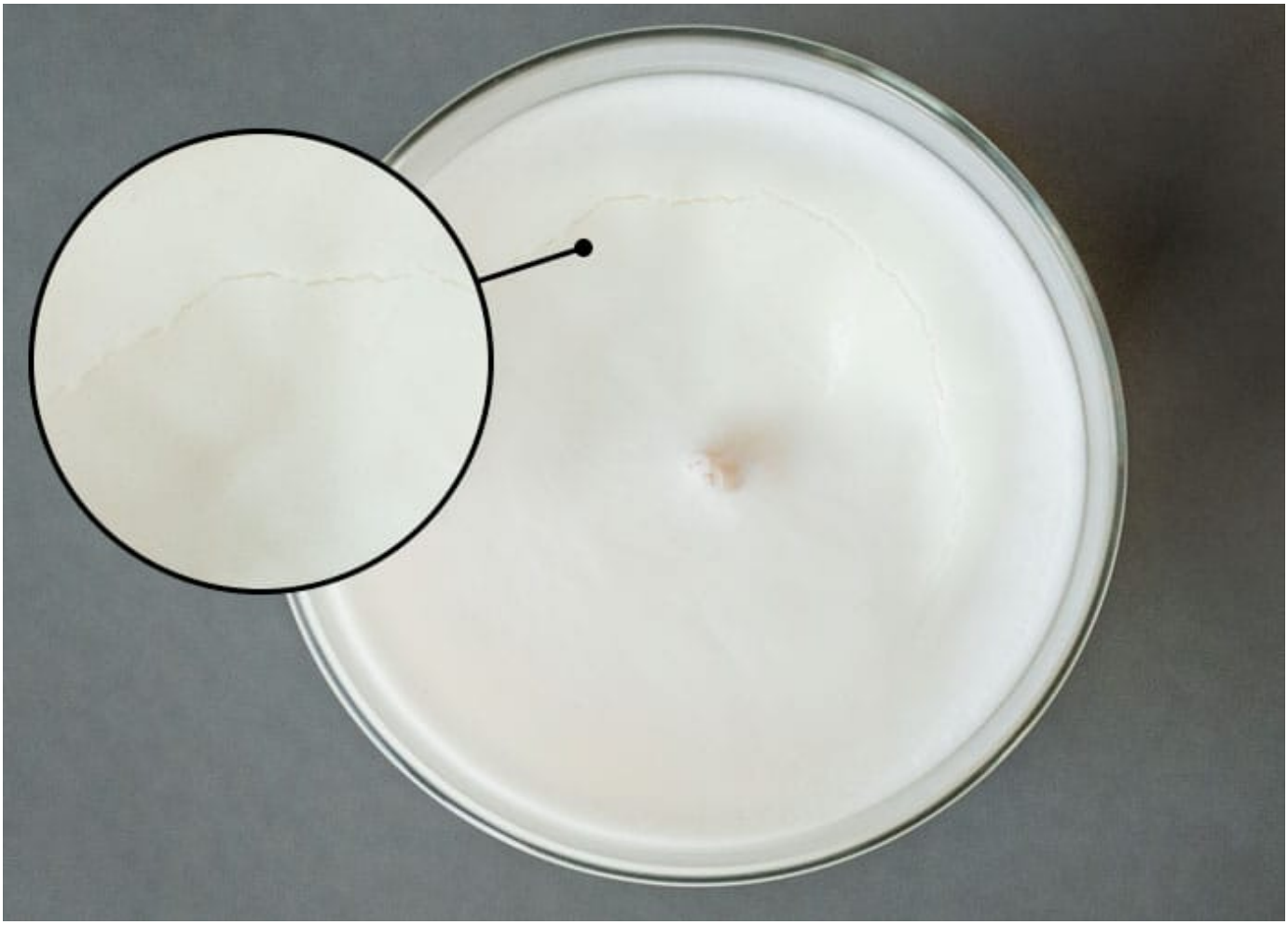

Cracking

Finding a very thin crack in a circle about 1" from the wick is common. This is caused by the combination of the wax shrinking slightly as it cools and tiny air bubbles stuck in the bottom of the container. After the wax hardens, it sinks a bit where the air bubble left a void. Most people will not notice this and it does not affect the burn of the candle.

Gently tap the container... +

Elevate your container... +

Adjust your pour temperature... +

Pour additional hot wax... +

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Rough, Pitted Tops After Burning

The rough, bumpy tops after burning a soy wax candle are caused when the hot wax in the melt pool cools and solidifies at an inconsistent rate. This is a feature of soy wax, and not a sign you did anything incorrectly.

In fact, you can even use this feature as a way to show the candle is made with an all-natural soy wax. It does not affect the performance of the candle. If you find you simply do not like the look of a soy candle post-burn, we recommend using a blended natural and paraffin wax like IGI 6006.

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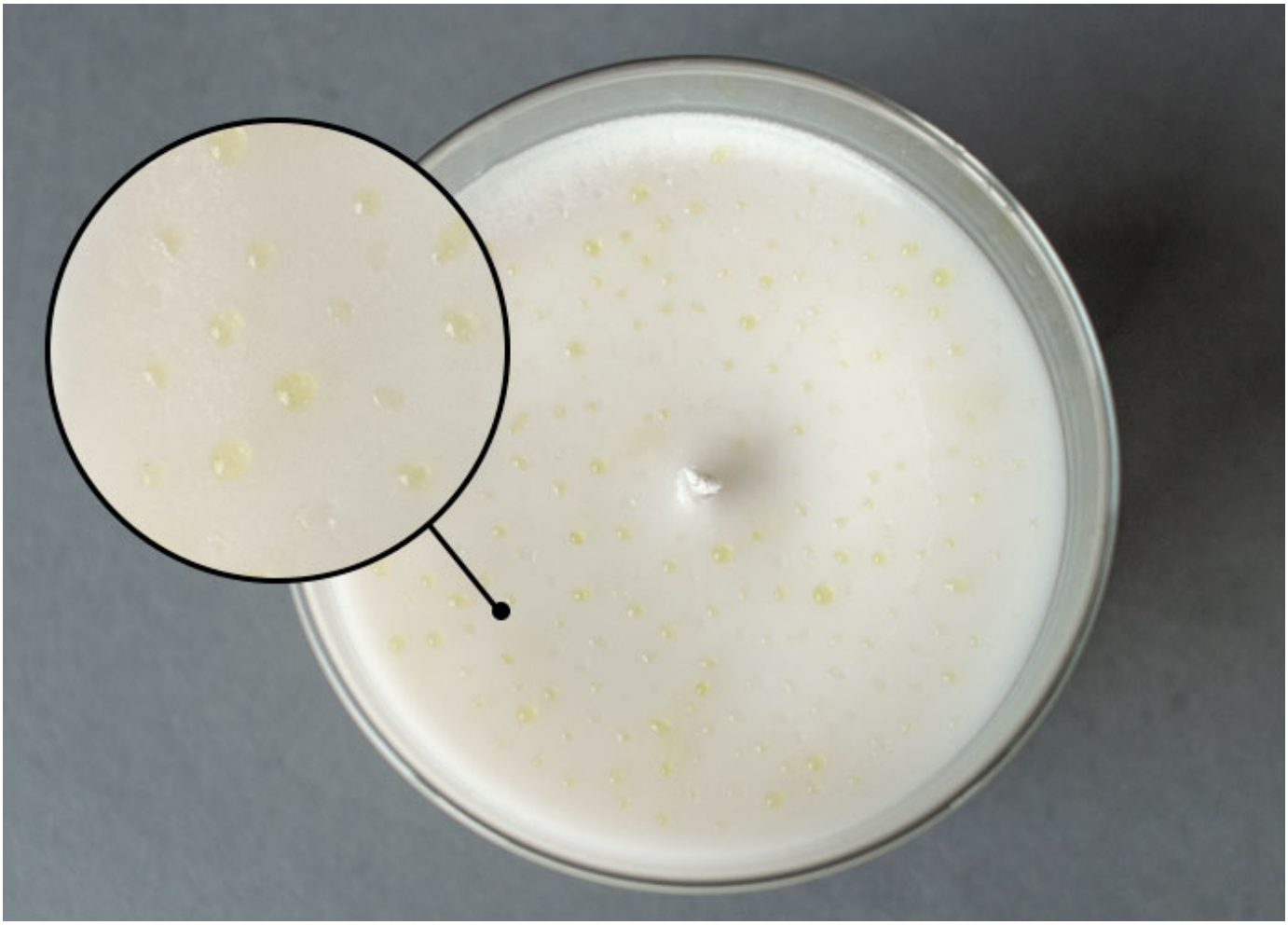

Fragrance Leaching

In the days after your candle has cooled, you may sometimes notice that there is a significant amount of liquid on the surface of your candle, as well as a very strong fragrance. This is what we refer to as fragrance leaching, seeping, or bleeding. Typically, seeping is caused by adding too much fragrance oil or by adding the fragrance at a temperature that is too cool. Appropriate temperatures and fragrance loads ensure the fragrance binds completely with the wax. If the fragrance does not bind properly, the fragrance will start to separate from the wax and rise to the surface of the candle or in some cases, settle to the bottom of the candle.

Mix fragrance oil in at 185°F... +

Stir gently for 2 minutes... +

Adjust your fragrance load... +

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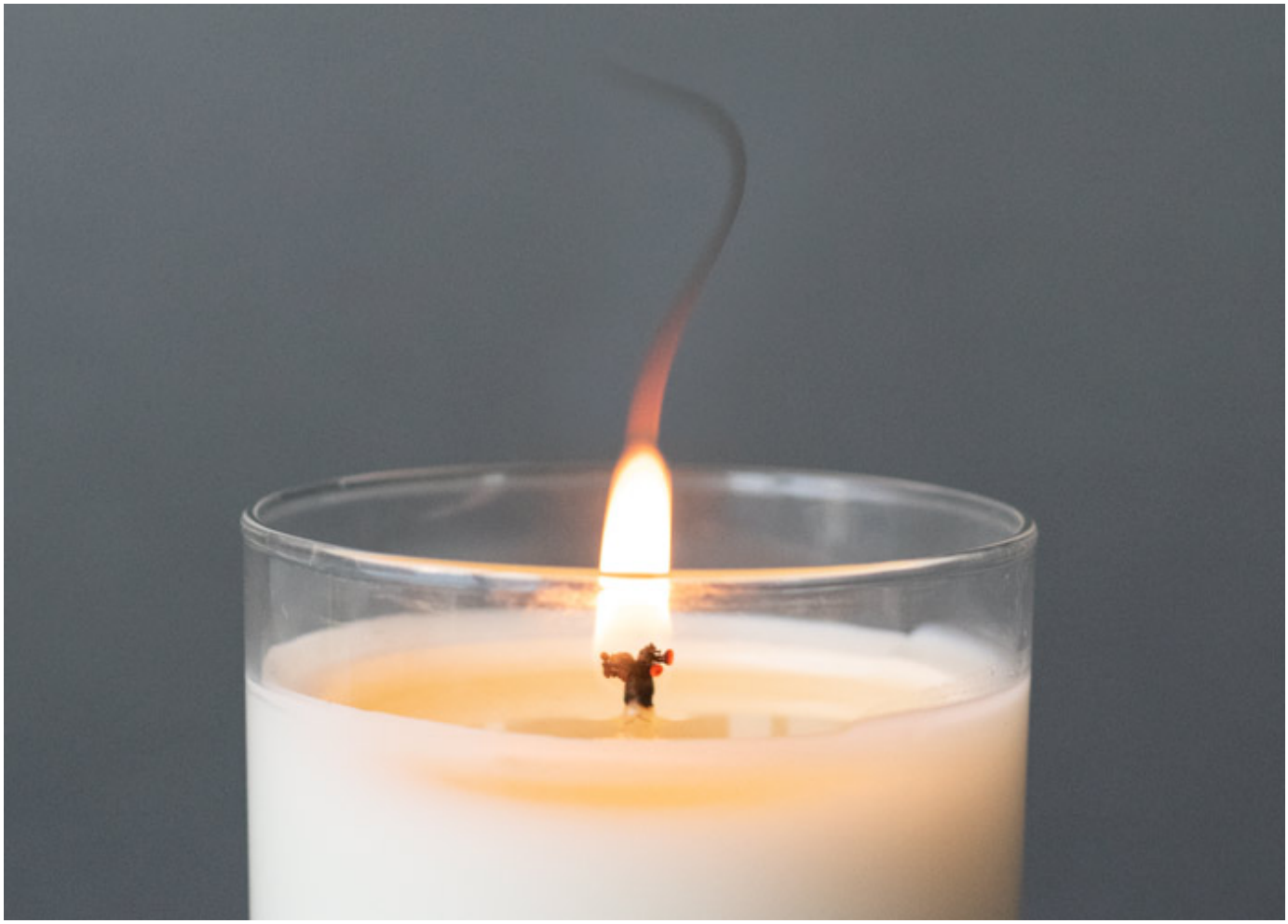

Sooting and Large Flames

While you're burning a candle you may notice some smoke coming from the flame. This is normal. Anything that burns will produce smoke, but a well-made candle will not produce excess visible smoke. If you see a large amount of smoke coming from the flame, that can be a sign you need to adjust your process and/or supplies.

Check your wick size and series... +

Decrease fragrance load... +

Try another wick series... +

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Tunneling

Tunneling occurs when a candle wick consumes too much fuel (wax+fragrance) too quickly. Instead of a slowly forming, wide melt pool that extends to the edges of a container, a narrow melt pool forms in the center and burns down quickly, leaving a large amount of wax on the sides of the container.

Increase your wick size... +

Decrease your wick size... +

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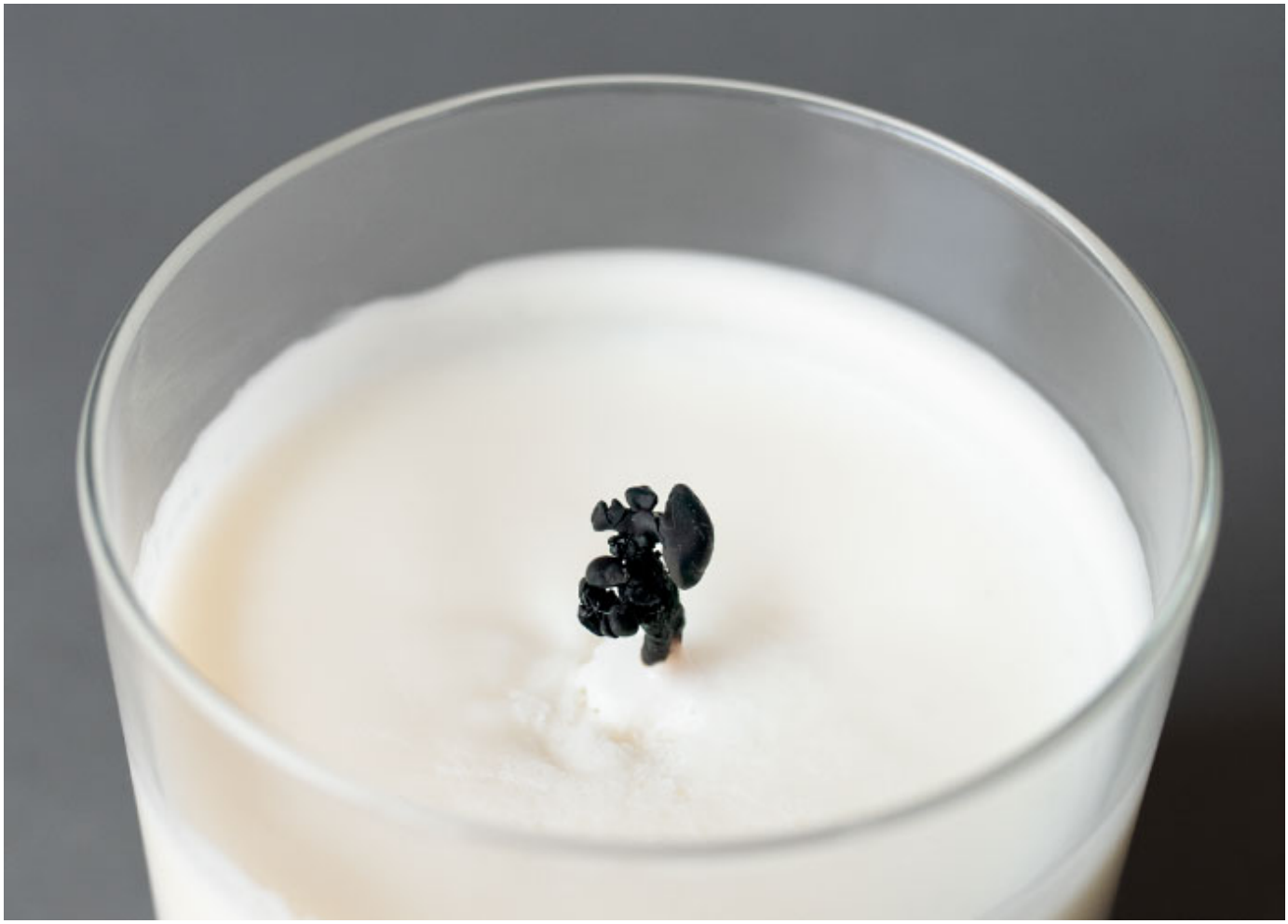

Mushrooming

The "mushroom" shape sometimes seen at the end of a candle wick after burning is the result of carbon buildup. This happens when the flame consumes more fuel (wax + fragrance + dye) than it can burn. It's a common occurrence, but there are a few things you can do to help manage it:

Use less fragrance and/or dye... +

Trim wick between burning... +

Size down your wick... +

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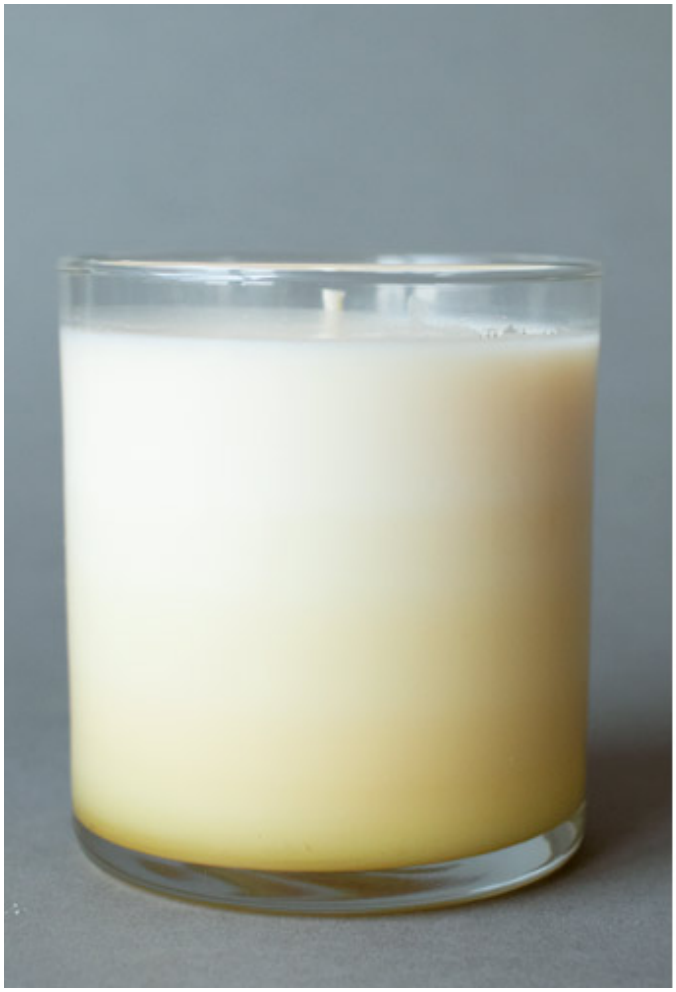

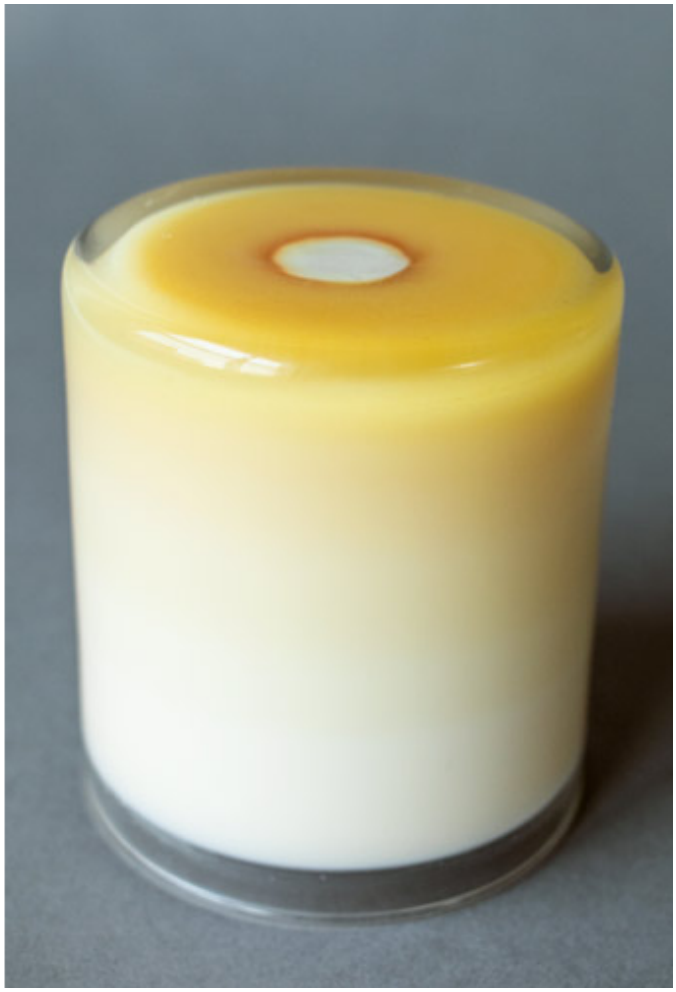

Mixing Issues

When the wax is not at a hot enough temperature, the fragrance may not go into solution and some of it may settle to the bottom of your pouring pitcher or candle. This can cause a poor or inconsistent scent throw. When the wax is at the optimal temperature of 185ºF, the fragrance will be evenly dispersed throughout the wax, ensuring a consistent cold and hot throw.

Mix fragrance oil at 185°F... +

Stir gently for 2 minutes... +

Check your fragrance load... +

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Clumpy, Wet Wax

Soy wax is a natural product, and may vary slightly from batch to batch. Sometimes you will get oily flakes that clump together and sometimes they will be very dry and crisp. When the wax is clumpy or oily it is usually due to the outside temperature or higher oil content in the wax. This is nothing to be alarmed about and you should follow regular soy candle making procedures.

Heat wax to 185°F... +

Don't worry... +

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Air Bubbles in Wax

During manufacturing, the soybean oil that eventually becomes soy wax is constantly stirred and agitated, which allows air into the oil. Occasionally, some of that air gets trapped in the wax during the flaking process, and is released when the wax is melted down for candle making. If your wax contains excess air, you might see a slightly foamy look on the surface while the wax comes to temperature, visible bubbles rolling to the surface as the wax is heated, or audible popping sounds, similar to frying food. You will probably not notice the air bubbles most of the time, but it can sound alarming to hear the popping noises while the wax melts.

Allow air bubbles to release... +

Be gentle with stirring... +

Slowly heat wax to 190-200°F... +

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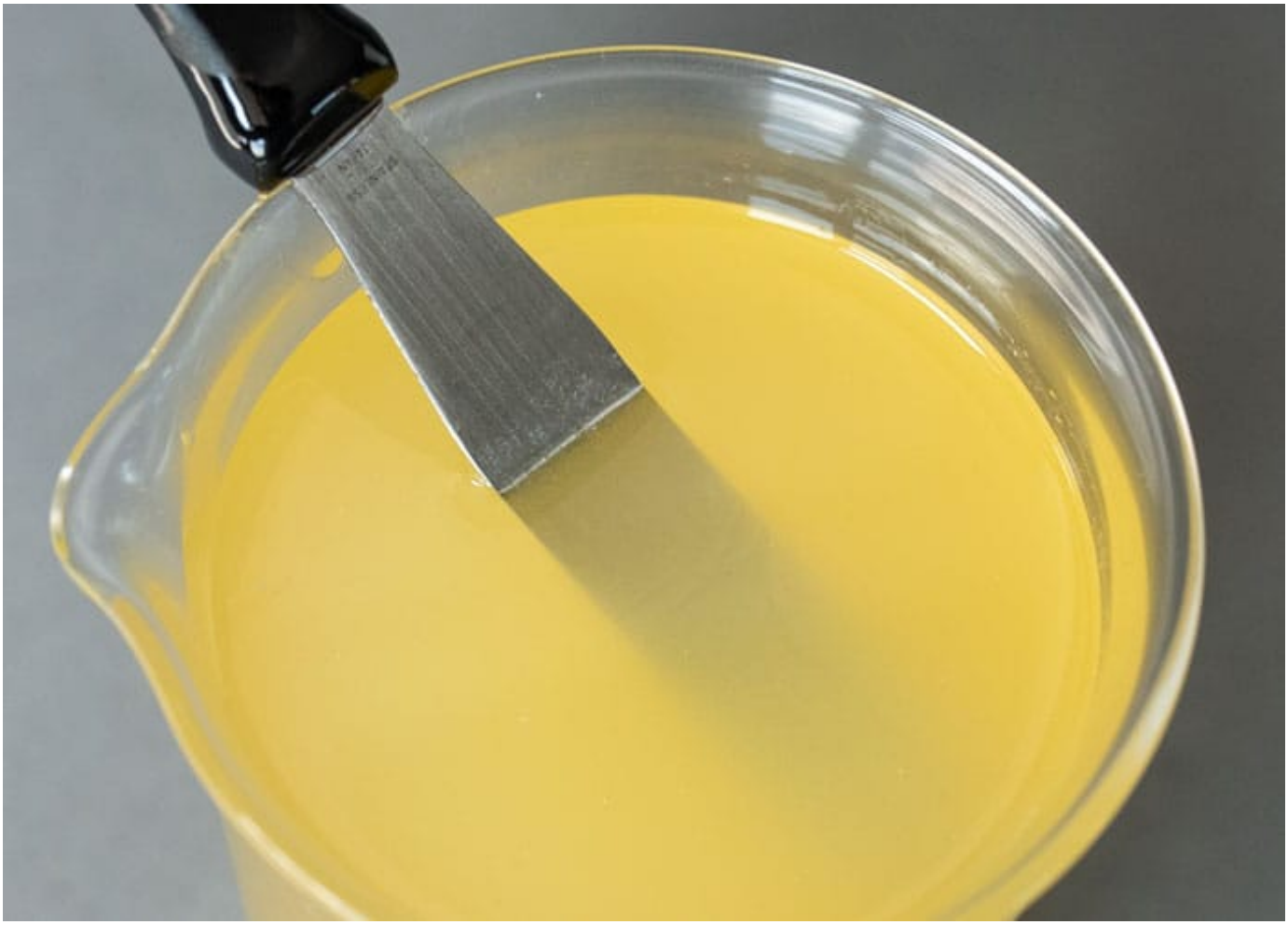

Cloudy Wax

During the manufacturing process, the soybean oil is being constantly stirred which allows air into the oil. As the wax undergoes flaking, condensation from that process may soak into the flakes in small amounts. When you melt your soy wax, it will typically become clear as all the flakes melt, but on occasion you may notice the wax looks very cloudy, similar to how it looks as it cools and sets up after pouring. This is caused by either air or water becoming trapped in the wax during the manufacturing process.

Allow wax to stay between 185-200°F... +

Give the wax time to air out... +

Store wax in a cool, dry location... +

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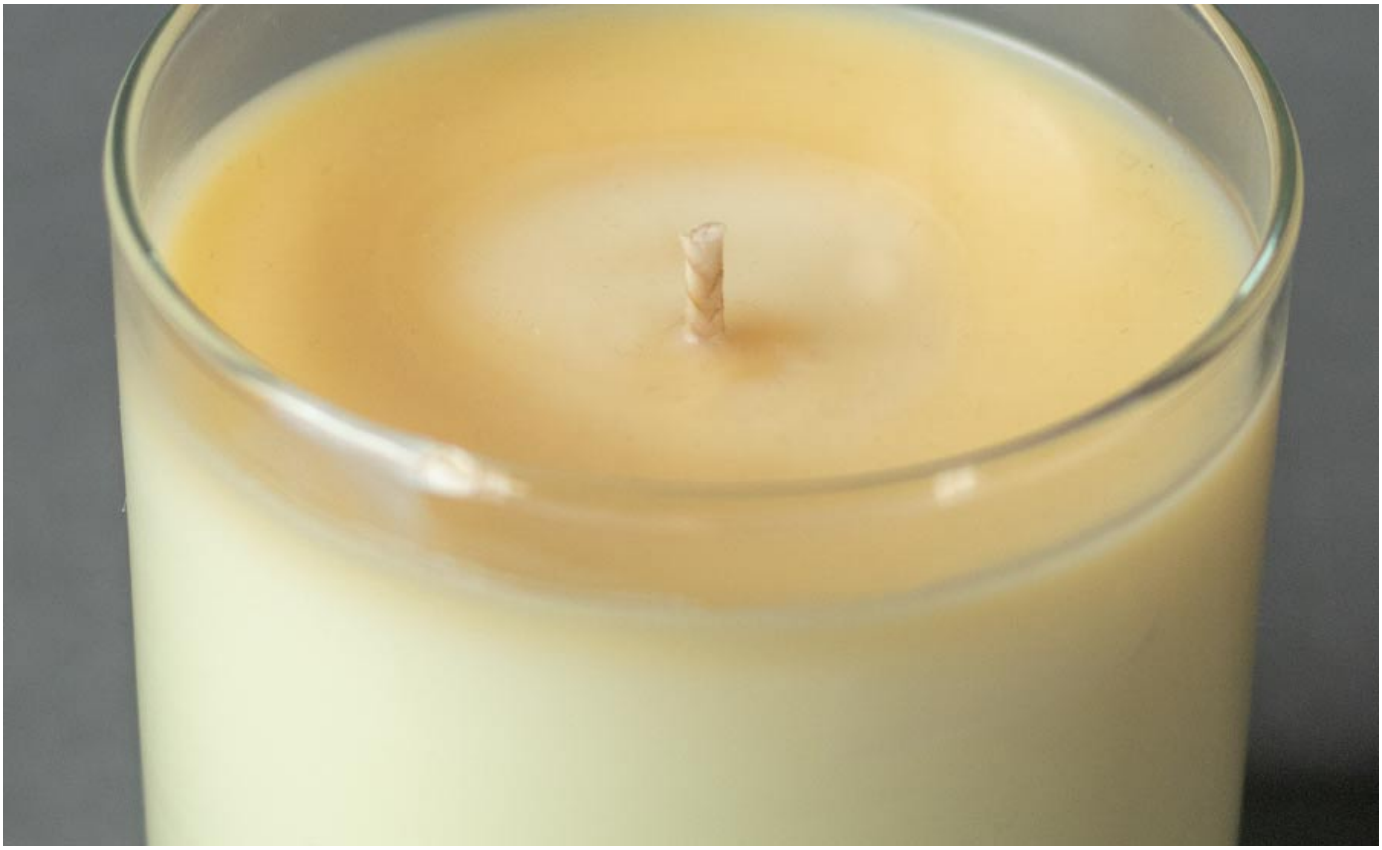

Wax Discoloring

Whether you add color to your candles or leave them dye-free, they will be affected by natural and/or artificial light at some point. Like the way sunlight will turn white fabrics yellow or cause bright colors to fade, dye-free candles will start to yellow and dyed wax will eventually fade. Fragrances with a high vanillin content and many citrus scents can cause the wax to develop a yellow tint within 24 hours. Fragrances with small amounts of vanillin and floral scents can cause a gradual yellowing over time.

Use a UV inhibitor... +

Add a small amount of ivory dye... +

Minimize your use of vanillin containing fragrances... +

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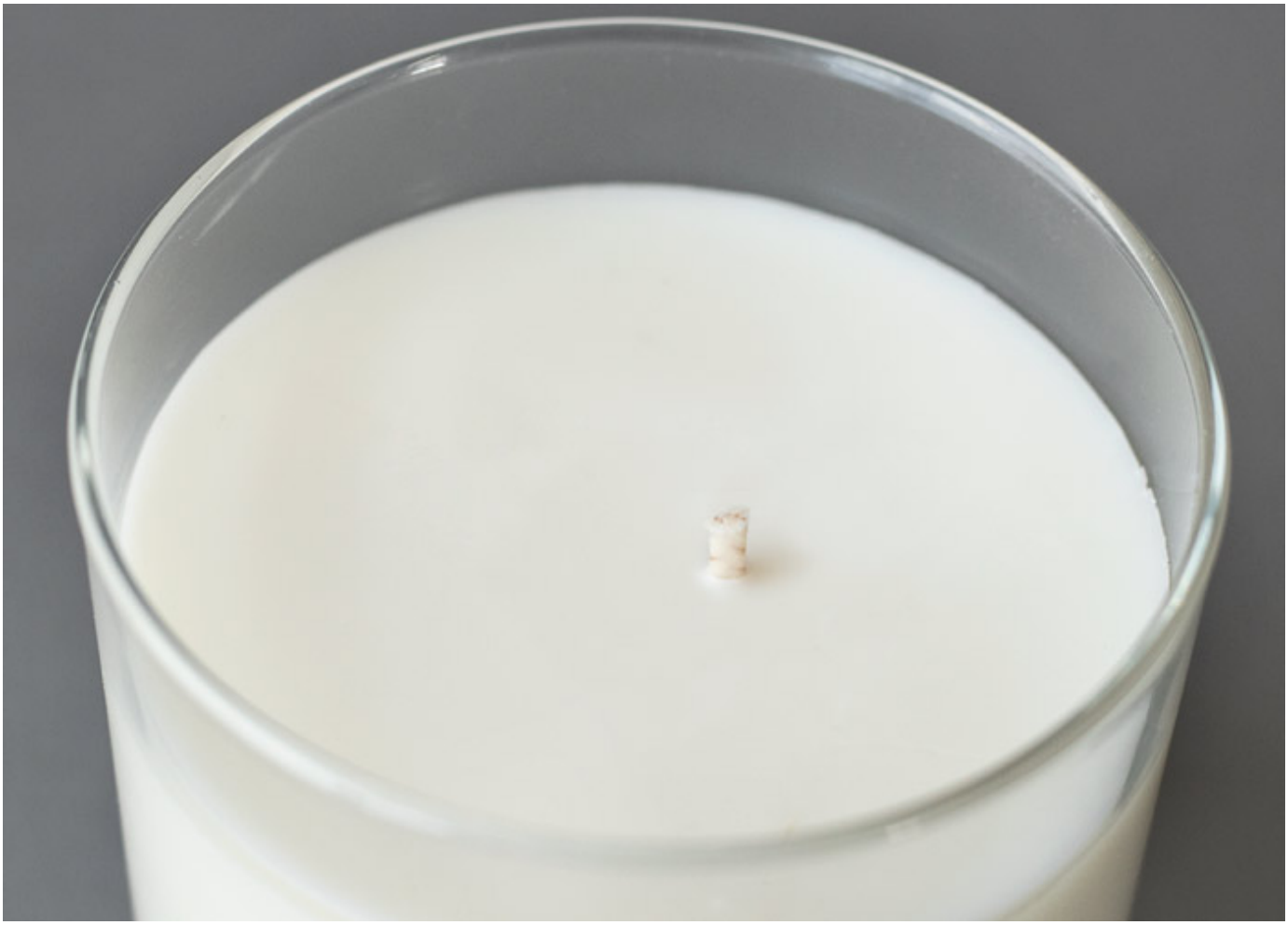

Wick Is Off-Center

Proper wick placement is essential for a safe, well-burning candle. If the wick is placed too far to one side or the wick leans, you may end up with a candle that burns on one side only. In some extreme cases, the wick can get too close to the side of the jar and overheat the glass, causing it to shatter.

Use a wick setter tool... +

Create your own guide... +

Keep wick held taut... +

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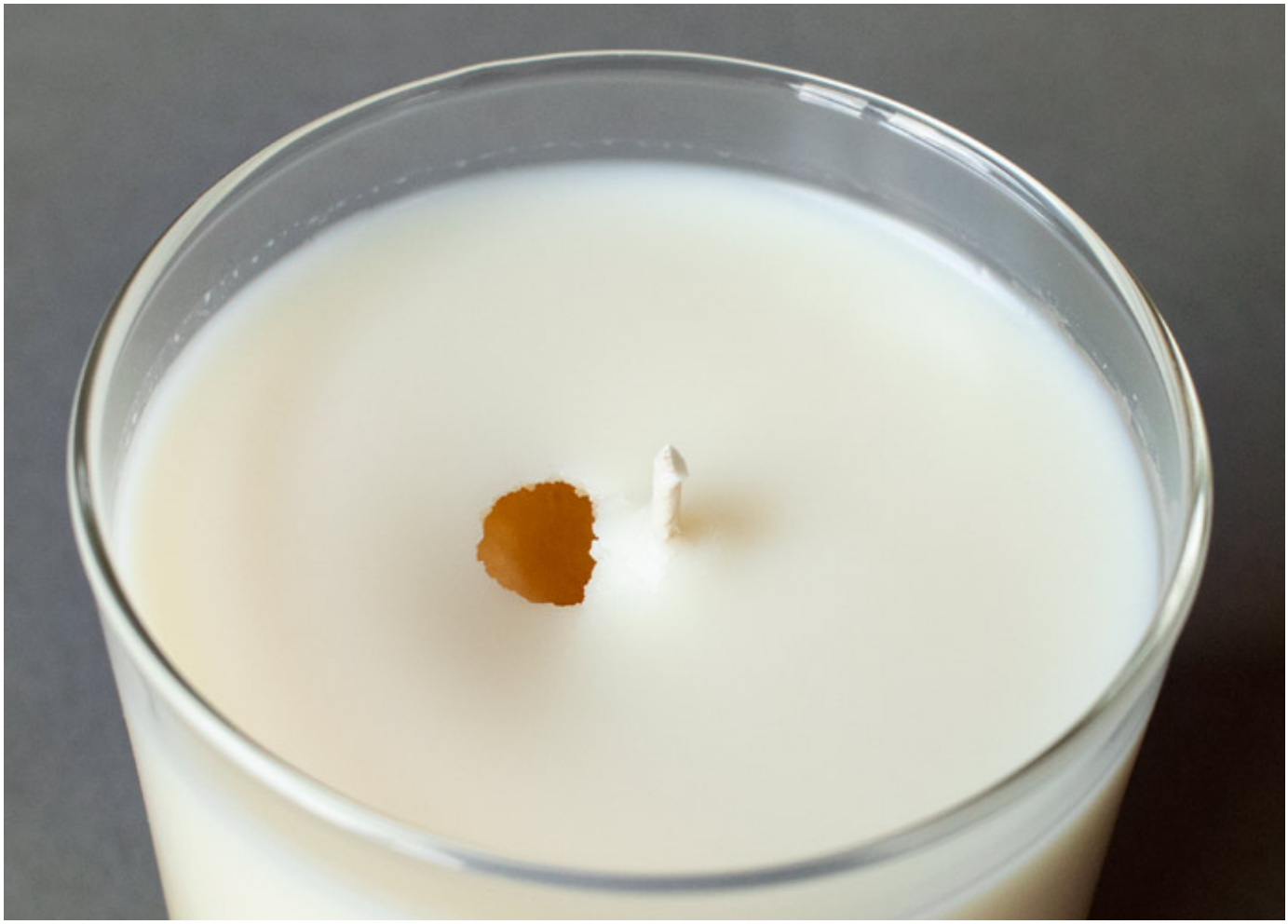

Sink Holes

Air can become trapped in soy wax during the manufacturing process. When you melt your wax at home, you may occasionally spot or hear some of that air escaping. Sometimes this trapped air ends up in your poured candle. While the wax cools and sets, the air works its way to the top and is released. However, if the surface of the candle sets before all of the air has time to release, it will get trapped in the candle. As the wax sets up, the air pocket leaves a void in the candle, and the surface above the void will collapse. Sometimes these sinkholes can be very small and sometimes they can be up to an inch deep into the candle.

Pour additional melted wax... +

Melt the surface... +

Monitor the wax... +

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Small Melt Pools

It takes a bit of time to establish a full melt pool, approximately 1 hour per inch of container diameter. If your candle has been burning for the appropriate time for your container size and the melted wax has not reached the edge of the container, your candle is not generating the heat needed for a full melt pool.

Increase your wick size... +

Don't trim the wick too short... +

Allow enough time for melt pool to form... +

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