Simple Castille Soap

Derived from https://www.soapqueen.com/bath-and-body-tutorials/castile-cold-process-soap-tutorial/

Ingredients:

* Olive Oil: 120 grams
* Sodium Hydroxide Lye: 15.43 grams
* Distilled Water: 31.54 grams
* Water-Dispersible Titanium Dioxide: 0.6 grams

Instructions:

1. **Preparation**: Suit up for safety with gloves and eye protection, and ensure you're working in a well-ventilated area.
2. **Mix Lye Solution**: Carefully measure the sodium hydroxide lye. In a separate container, measure the distilled water. Slowly add the lye to the water (never the other way around), and stir until fully dissolved. Be cautious of the fumes and the exothermic reaction, which will cause the solution to heat up.
3. **Dissolve Titanium Dioxide**: Once the lye is fully dissolved and the solution starts to clear, add the water-dispersible titanium dioxide to the lye water. Stir thoroughly to make sure the titanium dioxide is fully dispersed with no clumps.
4. **Prepare Oils**: Measure the olive oil in a separate container and set it aside.
5. **Combine and Mix**: Allow the lye water and the olive oil to cool to approximately 100°F to 110°F. Once both are at the correct temperature, slowly add the lye water to the olive oil while blending with a stick blender. Continue to blend until you reach trace, which is the point when the soap mixture thickens and leaves a visible trail on the surface.
6. **Mold**: Pour the soap mixture into your mold. Gently tap the mold on the counter to remove any air bubbles.
7. **Insulate**: Cover the mold with plastic wrap and wrap it with towels to insulate. This helps the soap go through the gel phase, which can result in a brighter color and smoother texture.
8. **Cure**: After 24-48 hours, check if the soap is firm enough to unmold. If it is, turn it out of the mold and cut into bars if needed. The soap bars will need to cure for 4-6 weeks to allow water to evaporate, which makes the soap milder and longer-lasting.