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Guidelines on the Application and Processing Of Melt and Pour Transparent Glycerin Soap Base

Our Warning! We have not tested every formulation that we list. This list is strictly for informational purposes and a guideline to various detergent, cosmetic and coating formulations. This information is provided without warranty of any kind or fitness for a particular use or purpose. You are encouraged to conduct your own tests. Read all labels and MSDS Sheets.

General Overview

The most important qualities of a good melt and pour soap base are:

1. Highly transparent.
2. Good lathering.
3. Good Ph control preferably between 7.2-7.8. The ph of 7 means neutral. Below7 means the soap is slightly acidic. Above 7 means the soap is slightly basic or (alkaline). Skin tolerance to very slight alkalinity is better than slight acidity.
4. However highly acidic or highly basic is not acceptable, that is beyond the 7.2 and 7.8 range.
5. The soap should not very hard or very soft.
6. The soap melting point should not be very high. Ideally it should be 55 degrees Celsius (131 degrees F). This will facilitate the best processing and setting conditions.
7. The soap odor should be good with no smell of rubbing alcohol or any other pungent ingredient with nearly no unpleasant chemical smell.
8. The soap should not contain high percentages of glycerin or Sorbitol which can cause sweating particularly when relative humidity is very high such in summer, meanwhile
9. Glycerin percentage should not be too low to affect transparency and the moisturizing effect.
10. The color of the soap base should have no yellowish hue or white haziness of any sort.
11. The soap's transparency should not be by low temperature or freezing.
12. Make sure that the soap has properly set before releasing from its mold.
13. Upon setting the base should not form a rough or shrinking crust on the upper surface after setting.
14. The soap should readily accept the special colors for melt and pour.
15. The soap should be miscible with most types of fragrances or essential oils.
16. The soap should be very clean with no impurities or black spots or spots of any kind.
17. The soap should be well preserved against any bacterial or fungus attack.
18. It also should be well packaged to ensure no moisture loss and deformation of its shape.
19. Moisture content should not exceed 12-13 %.
20. The soap base should have a coconut oil well saponified with unsaponified materials less than .2% the base should not depend totally on surfactants (non-soap) such as sodium laureth sulfate for lathering. Most surfactants are the outcome of the petroleum industry and not chemically categorized as soaps.
21. Basically the good soap base should not contain alcohol, fillers of any sort, wax, or animal products.
22. The soap base should be cost effective.

Instructions for handling, molding and processing the Melt and Pour Soap base:

There are two ways to melt the soap base:

- Microwave oven
- A jacketed hot water bath ideally with thermostatic control (like the soup small heating kettles in restaurants.)

Note: For simplicity you can use a double boiler pan with hot water in between. Instructions for double boiler are similar to microwave.

Microwave Instructions

1. Thinly slice or grate the soap base for ease of melting.
2. Place the soap in a Pyrex cup and place it in the microwave for 30 seconds (For half a pound)
3. Remove and stir slightly.
4. Continue to microwave for another 30 seconds.
5. Add soap colorant and stir until blended (soap colorant should be minimal).
6. Add soap fragrance to the desired level, and stir gently and thoroughly
7. Pour soap into soap molds. Let cool and harden before popping out of the moulds.
8. For fast set allows the soap to cool for 10 minutes, then cover in plastic wrap and place in refrigerator (not the Freezer) until set.
9. Wipe and clean the microwave.

Things to beware and ensure in processing the Melt and Pour Soap base:

1. Never allow the soap to boil. Boiling might denature the color and cause a yellowish hue.
2. Children require adult supervision, and should not handle alone the hot and melted soap.
3. Ideally the soap temp. Prior to pouring should be between 55-60 Celsius. In other words you can put your finger in the soap and it shouldn't burn.
4. Do not over stir when mixing colors and fragrances. But if this happens allow 10 minutes of settling for the release of air bubbles. Air bubbles if tapped in the mould will spoil the transparency
5. Always pour on a leveled surface.
6. When placing an insert or an object in the soap. Pour the first layer and let cool. Insert the object. And when pouring the second layer it has to be higher in temperature up to 70 degrees Celsius. Otherwise separation of the two layers might occur.
7. Avoid diluting the soap with water or any other chemical. The only exception to this is to add a maximum of 5% glycerin should you need a softer or more transparent soap.
8. Avoid contact of soap with eyes.