Melt and Pour Soap Information
Benefits of Working with Melt and Pour Soap

Creating your own luxurious soap has never been easier with the help of Natures Garden. Thanks to the awesome Melt and Pour Soap bases available, the endless varieties are dazzling and unique. Plus, as an alternative to hot or cold process soap, M&P soap does not require the use of any dangerous lye. Crafting made safe and easy; this soap is simply melted, color and fragrance added, and poured into molds. Natures Garden offers Melt and Pour Soap Kits that contain all the fundamental supplies needed to start producing your own homemade soaps.

What is Melt and Pour Soap?

Quite simply, Melt and Pour Soap is a soap based product that is composed of 50% soap and 50% solvents. This soap is premade and unscented. Essentially, you could cut off a small piece of the soap base and wash your hands with it. But why would you want to do that when you can craft personal works of art using various colors, shapes, and additives to create unique beauty bars? The soap and solvent balance is especially formulated to absorb additives. All of our Melt and Pour Soaps have been especially created to be extremely soothing for the skin. They are made without any animal fats, and are not tested on animals. Considering the many bar soaps available at your local retail stores, customized M&P soap is often better for your skin and more inexpensive in comparison. This amazing soap also has the capability to be melted and re-melted without losing any of its quality.

In fact, one of the great advantages of M&P soap is that the process is so easy, it allows for soap makers to really focus on the unique aesthetic that makes this soap their own.

Unscented Melt and Pour Soap is offered by Natures Garden in many different forms.

These forms include transparent, opaque, colored, marbleized, and goat’s milk. However, all melt and pour soaps are originally transparent.

All melt and pour soap does not have to be vegetable based, although this type is common. Most melt and pour soaps contain glycerin.
Although glycerin is usually in M&P soap at a rate of 20% of the total base, it is an elemental component in ensuring that the soap has a soothing, moisturizing affect on the skin. Most commercial soaps on the market have very little glycerin in them; making them less kind to your skin. It is possible for glycerin to be extracted and other components such as titanium dioxide used to render the soap opaque white.

Melt and Pour Soap Ingredients & Their Role in Soap

In this section, we will break down the ingredients in Natures Garden melt and pour soap bases so that you know what purpose these ingredients have.

1. **Clear Melt and Pour Soap Base** - Ingredients: Glycerin, Propylene Glycol, Sodium Stearate, Sodium Laureth Sulfate, Sorbital, Coconut Oil, Sodium Myristate, Triethanolamine, Sodium Laurate, Sodium Cocoate, Purified Water.

2. **Opaque White Melt and Pour Soap Base** - Ingredients: Glycerin, Propylene Glycol, Sodium Stearate, Sodium Laureth Sulfate, Coconut Oil, Sodium Laurate, Sodium Myristate, Triethanolamine, Sodium Cocoate, Purified Water, Titanium Dioxide.

3. **Goat’s Milk Melt and Pour Soap Base** - Ingredients: Glycerin, Propylene Glycol, Sodium Stearate, Sodium Laureth Sulfate, Coconut oil, Sodium Laurate, Sodium Myristate, Triethanolamine, Sodium Cocoate, Purified Water, Goat’s Milk, Titanium Dioxide, DMDM Hydantoin.

<p>| Glycerin       | A humectant, meaning it attracts moisture to your skin. During the soap making process, glycerin is made as a natural by-product. Most of the commercial soaps you find in stores have had some of the glycerin removed. Melt and pour soaps have a higher percentage of glycerin, and thus is a lot more moisturizing to the skin than most store bought soaps. |</p>
<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene Glycol</td>
<td>Propylene glycol is a colorless, odorless liquid which is Generally Recognized as Safe (GRAS) by the U.S. Food and Drug Administration (FDA). PG is used in melt and pour soap as a humectant. It is a wetting agent that helps oil based materials mix with water.</td>
</tr>
<tr>
<td>Sodium Stearate</td>
<td>Ingredient used in soap making that is a result of using palm oil fatty acids. It is a cleansing agent.</td>
</tr>
<tr>
<td>Sodium Laureth Sulfate</td>
<td>Ingredient derived from Lauric Acid. It is used as a cleansing agent in soap, and helps to increase lather. Lauric Acid is the acid found in coconut oil and palm kernel oil.</td>
</tr>
<tr>
<td>Sorbital</td>
<td>Sorbital is an ingredient in melt and pour soap that improves clarity of the soap, and it is also considered a humectants. Sorbital has been used in cosmetic products for close to a century and is a Generally Recognized as Safe (GRAS) product by the United States Food and Drug Administration FDA.</td>
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<tr>
<td>Coconut Oil</td>
<td>Coconut Oil</td>
</tr>
<tr>
<td>Sodium Myristate</td>
<td>Ingredient used in soap making that is a result of using coconut oil or palm oil fatty acids. It is a cleansing agent.</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Triethanolamine is used primarily as an emulsifier and surfactant. It also serves as a pH balancer in soap. TEA is a fairly strong base: a 1% solution has a pH of approximately 10, whereas the pH of skin is below pH 7. In order for soap to actually clean your skin, it must have a pH higher than neutral (7), in the range of 8-9 pH.</td>
</tr>
<tr>
<td>Sodium Laurate</td>
<td>Ingredient derived from Lauric Acid. It is used as a cleansing agent in soap, and helps to increase lather. Lauric Acid is the acid found in coconut oil and palm kernel oil.</td>
</tr>
<tr>
<td>Ingredient</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Sodium Cocoate</td>
<td>Ingredient used in soap making that is a result of using coconut oil. It is a cleansing agent.</td>
</tr>
<tr>
<td>Purified Water</td>
<td>Purified Water</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>Ingredient added to melt and pour soap to give it an opaque white color. Titanium dioxide is also known for blocking UV light, and thus is added to lotions to make sunscreen products.</td>
</tr>
<tr>
<td>Goat’s Milk</td>
<td>Powdered Goat’s Milk</td>
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<tr>
<td>DMDM Hydantoin</td>
<td>Ingredient added to melt and pour soap when Goat’s milk is an ingredient. This ingredient has antimicrobial qualities, working as a preservative.</td>
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</table>

**Is Your Melt and Pour Soap Considered a Soap?**

When checking the ingredients of Nature’s Garden melt and pour soap, the listing is in order of prominence of ingredients used to make the soap base. As with food, the more of the ingredient is in the soap, the higher up on the list (label) it is. Melt and pour soaps that contain all-natural ingredients, with no additional detergents added, are considered “soap”, and are not required to have labels that contain the ingredients in descending order. These natural “soaps” are governed by the Consumer Product Safety Commission (CPSC). Melt and pour soaps that contain detergent ingredients that enhance the quality, performance, or clarity of the soap are considered to be cosmetic products, and must follow the FDA’s guidelines for proper cosmetic labeling. These guidelines include labeling all ingredients in your melt and pour soap in descending order of prominence. Visit these websites for guidelines on labeling your melt and pour soap:

- [Food & Drug Administration](#)
- [Consumer Product Safety Commission](#)
What form do Natures Garden Melt and Pour Soaps come in?

With the exception of our French Milled, all of our M&P soaps are made into two pounds blocks that are perforated for ease of exact measuring. This perforation also aides in cutting or breaking down of the block for the melting process.

What will you need to make your own molded melt and pour soaps?

Before starting on your brand new exciting adventure, you will want to make sure that you have all of your supplies and equipment ready and available. We suggest keeping a small notebook and pen in your creation station to jot down any notes.

Recommended Equipment:

- Natures Garden Melt and Pour Soap Base
- Cutting Board
- Natures Garden Body Safe Fragrance Oil
- Measuring Utensils (stainless steel only)
- Natures Garden Soap Dyes
- Mixing Spoon (wood or stainless steel)
- Large Knife
- Rubbing Alcohol in spray bottle
- Any additives
- Cotton Swabs
- Paper Towels or Kitchen Towels
- Soap Molds

How to properly melt your soap:

The first step of the Melt and Pour Soap process is to cut along the perforation of the 2 pound block. Each cube of the block is approximately 1 ounce. Your hands may become slippery when working with soap, so be very careful when cutting your soap. It is alright to cut the whole block, as long as you put any remaining unscented soap into an air tight container. This will allow for the soap to sit without drying out in dry environments, or sweating in moist environments.
Although there are many routes to pursue when melting M&P soap. There are only two ways that are recommended.

The first way is to use a double boiler system. You will want to heat the boiling system on high. Once the water in the bottom pot is boiling, reduce the heat to a simmer. Take the allotted amount of soap cubes you desire to use and carefully place them in the top pot. Allow the cubes to melt into liquid form. The typical melting point of M&P soap is 120 degrees Fahrenheit. The pour temperature will be approximately 145 degrees Fahrenheit. Heating your melt and pour soap above 150 degrees may cause your soap to develop an increase in bubbles.

The second option is to use a microwave. Using a glass measuring container, take the allotted amount of soap cubes you desire to use and place them inside of the container. You will want to cover the container with plastic wrap to avoid any unnecessary evaporation. Place the glass container in the microwave and cook on High for thirty seconds. When the time is up, check the mixture. Continue to cook the M&P soap in thirty second increments until the base is completely liquid.

Either option is accepted and successful; it usually just comes down to preference. The common factor to remember with either option is to not boil the soap base. On top of the horrible odor of burning, there are two important reasons to avoid this. The first reason is that if you boil your M&P soap, it is likely that you can evaporate too much water and your end product may crack, become brittle, or form white crystals on the finished soap. The second reason is it is possible to caramelize all of the sugars in the base, and the soap will change colors.

Do not use a crock pot to melt your soap, and do not place your soap over a direct heat source; doing so will likely lead to burned soap.

As a basic rule of thumb, you do not have to add any water to M&P soap when re-melting, however, if the specific M&P soap has been re-melted several times, many people find it necessary to add a small amount of water to counteract any evaporation that may have occurred from the various melttings.

**How to prevent tiny bubbles in your soap:**

There is also another important rule to remember when creating M&P soaps, and that is the less stirring the better. Anytime the soap base is stirred, there is a possibility of air bubbles. These air bubbles may cause problems in the end product, so it is best to avoid them to begin with. The suggestion for mixing the base with any additives, colors, or fragrances, is to stir very slowly. A gentle touch is all you need for mixing or trying to break down a chunk of unmelted soap.
When choosing to scent your soap, you want to make sure that you use fragrance oils, not water-based fragrances. There is no single formula or recipe for percentage of fragrance use in soap. We suggest that the total amount of body safe fragrance oil used be 3-5% of the entire mixture. Using too much fragrance will cause your soap to sweat. When selecting your fragrance oils to scent your M&P soap, it is extremely important that you choose body safe fragrances. Natures Garden provides IFRA statements for each fragrance we sell. An IFRA statement pertains to a specific fragrance, and tells you at what percentages this fragrance is considered skin safe in various applications. On an IFRA statement, soap is considered a category 9. Since soap is going to come into contact with your skin, you never want to scent your soap with any fragrance oils that may be harmful or may cause skin irritation or reactions. This is why it is immensely important that you purchase your fragrance oils from a reputable company that provides MSDS sheets, and up to date global IFRA certificates of compliance for every fragrance you purchase. Be assured that this is the only way that you can feel confident that your products are safe for you, your family, and your potential consumers.

This is what a sample MSDS Sheet and IFRA Certificate of Compliance Looks Like

Nature’s Garden

42109 St. Rt. 18 Wellington, OH 44090
PH (440-647-0100) FX (440-647-0220)
Material Safety Data Sheet 08/20/09

None of our fragrances are tested on animals.

All of our fragrances were formulated based on safety assessments made by the Panel of Experts of the (RIFM) Research Institute for Fragrance Materials and are carefully reviewed by the IFRA (International Fragrance Association) Scientific Committee. Our fragrances comply with RIFM standards. All of Natures Garden fragrance oils are packaged in phthalate-free, recyclable, HDPE (resin code No.2) plastic bottles.
Fragrance Name: Australian Bamboo Grass Fragrance Oil

Physical / Chemical Characteristics:

<table>
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<tr>
<th>Characteristics</th>
<th>Value</th>
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<tr>
<td>Boiling Range</td>
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<tr>
<td>Specific Gravity</td>
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<tr>
<td>Vapor Density</td>
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<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Coating V.O.C.</td>
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<tr>
<td>Material V.O.C.</td>
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<tr>
<td>Solubility in Water</td>
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<tr>
<td>Percent Volatile by Volume (%)</td>
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<tr>
<td>Vapor Pressure (mm Hg @ Temp)</td>
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<tr>
<td>Appearance</td>
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<td></td>
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<td>Flash Point</td>
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<tr>
<td>Stability</td>
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<tr>
<td>HMIS CODES</td>
<td>H/1 F/1 R/0 P/C</td>
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Fire and Explosion Data: Extinguishing media: Use foam, dry chemical, & CO2. Special firefighting procedures: Self contained breathing apparatus & protective clothing should be worn when fighting fires involving chemicals. Fire and explosion hazards: None known.


Emergency & First Aid Procedures: Inhalation: seek fresh air immediately, if breathing is difficult - see doctor. Eyes: Flush immediately with clean water for at least 15 minutes. Contact doctor. Skin: remove contaminated clothing, wash affected areas with soap and water. Ingestion: give water to dilute, see doctor.

Hazardous Ingredients/ SARA III Information: This proprietary material contains the following toxic chemicals subject to the reporting requirements of section 313 of Title III of the superfund amendments and reauthorization act of 1986 and 40 CFR Part 372: None

Disclaimer: This data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, and storage and disposal of this product are beyond control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of this product's improper use. No warranty expressed or implied regarding the product described herein shall be created by or inferred from any statement or omission in this MSDS.
This is to confirm that the subject fragrance is composed of aroma chemicals, natural essential oils and other functional components in compliance with the most recent guidelines published by I.F.R.A. (International Fragrance Association); 44th amendment published on 08/07/09. The IFRA standards are based on safety assessments from RIFM. (Research Institute for Fragrance Materials).

Fragrance Name: Australian Bamboo Grass

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>MAXIMUM USE LEVEL</th>
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</tr>
<tr>
<td>CATEGORY 3</td>
<td>.9%</td>
</tr>
<tr>
<td>CATEGORY 4</td>
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</tr>
<tr>
<td>CATEGORY 5</td>
<td>8%</td>
</tr>
<tr>
<td>CATEGORY 6</td>
<td>0%</td>
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<tr>
<td>CATEGORY 7</td>
<td>.9%</td>
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<tr>
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<tr>
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<td>12%</td>
</tr>
<tr>
<td>CATEGORY 10</td>
<td>12%</td>
</tr>
<tr>
<td>CATEGORY 11</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Category 1:** Ingredients must be GRAS. Products in this category include: Lip products & Toys

**Category 2:** Deodorant & Antiperspirant products

**Category 3:** Eye products, male facial creams, baby creams, baby lotions, baby oils, products applied to recently shaved skin

**Category 4:** Products applied to unshaved skin (perfumes), hair styling products, hair sprays, body creams, body oils, lotions (except for baby products), hair deodorant, foot care products
Category 5: Female facial creams, facial make-up, hand cream, facial masks, baby powder/talc, wipes or refreshing tissues for face, neck, hands, body.

Category 6: Ingredients must be GRAS. Products include: mouthwash, toothpaste.

Category 7: Intimate feminine wipes, toilet wipes, baby wipes, insect repellent

Category 8: Make-up removers, nail care, hair dyes

Category 9: Bar soap, bath gels, foams, mousses, salts, oils & other products added to bathwater, body washes, conditioner (rinse off), face cleansers, liquid soap, shampoo of all types, shaving creams of all types, aerosol air freshener sprays

Category 10: Laundry detergents of all types, fabric softeners of all types, household cleaning products, dishwashing detergent, shampoos for pets

Category 11: All non-skin contact, air fresheners, plug-ins, solid substrate, membrane delivery, electrical, potpourri, powders, sachets, incense, lamp rings, reed diffusers, joss & incense sticks, animal sprays & cat litter, candles, deodorizers, maskers, insecticides, scratch and sniff

It is the responsibility of our customers to ensure the safety of the finished product containing this fragrance by conducting all necessary tests. You will notice that the recommended maximum usage level differs from what IFRA allows and what Natures Garden suggests. Natures Garden frequently suggests a maximum usage level that is less than that of IFRA. Your discretion is advised.

Please be advised that fragrances that contain vanillin can cause soap to discolor to a tan/brown color over time. Natures Garden provides the vanillin percentage for every fragrance we sell. Vanillin doesn’t harm your soap; it simply changes its color over time.

What kind of coloring should you use?

Color opens up a wide array of possibilities for soap. Do not feel pressured to color your soap; the decision on which colors to use is up to you. If you decide to color your soap, Natures Garden offers Soap Dyes in a vivid rainbow of colors. As an option, you can always purchase the 3 primary color soap dyes (red, blue, and yellow) and create your own color wheel. When making M&P soap, NEVER use liquid candle dye. You also do not want to use food coloring to color your soap. It will not mix well with your soap. After you have found the color you like, just make sure you note how many drops of each color you are using on your soap testing sheets.

What kind of additives can you add?

The possible additives available for M&P soaps are endless. Any dried herbs, ground spices, loofah chunks, shea or cocoa butter, oatmeal, small plastic toys or erasers (for a fun children’s soap), cosmetic clays, exfoliants, mica, and even dried flowers usually top the list. Although do have fair warning that many of your herbs and flowers will turn brown.
The best recipe of addition on any of these additives is 1 teaspoon to 1 tablespoon per pound of M&P soap. Then of course is the question of when is the best time to add any of your additives. Any additive that needs to melt at a higher temperature should be melted separately, and then combined into the liquid soap base. Any other melttable additive should be added when you are melting the M&P base. This allows for the mixture to come together in liquid form before any stirring occurs. For any additives that are in powder form, it is best to melt the M&P soap base first, and then take a small portion, roll your powder into it, and incorporate this paste into the rest of the melted base. This will prevent any clumping that is usually a problem when dealing with powder additives. Pertaining to any liquid additives such as color or fragrance, it is best to add these elements once the M&P soap is melted and in full liquid form. Remember slow stir. We are asked all of the time if oils like palm oil, hemp oil, almond oil can be added to our melt and pour soap. The answer is yes, but the soap will not lather as well when you add these extra oils, and the additional oil content may make your soap sweat more.

Once the M&P soap base is completely liquefied, you will want to add any additives- fragrance, color, spices, etc. If you desire for your additives to be suspended in your soap, you will want to add those additives at approximately 125 degrees. You should also be aware that when you add extra additives to your melt and pour soap, you may have to add a preservative to prevent bacterial, mold, and yeast growth. A popular preservative is Germaben II, and is used at .3 to 1% of the total weight of the mixture. You never want to add your fragrance oil to your soap base while it is still on the heat source. Any additional heat that the fragrance oil receives will actually dull its scent potency.

**Pouring your soap**

Now, you are ready to put your creation into a mold. Once you know which mold you are going to use. It is important not to rush the pour. Relax; pour slowing until the mold is full. The slower you pour the least likely you will have bubbles in your soap.

There are many possible molds available for M&P soap. Realistically, anything that can withstand the temperature of the melted M&P soap will work, the only requirement is it has to hold liquid. Any candy, plastic, soap mold or 3D soap mold will do. You can also get creative and use PVC or ABS pipes, plastic storage or organizing containers will work as well. A new wave is now hitting M&P soap on the creative level, and many soapers are using things such as cat food tins or soup cans (great recycling idea)! Now that is definitely thinking outside of the can.
If small bubbles arise on the back of the soap, prior to the hardening process, a spray bottle with rubbing alcohol works wonders. Just simply mist the soaps with the rubbing alcohol, and this will pop any of those pesky bubbles.

Now you are ready to cool. The best method of cooling is to leave the mold where it lays. However, if you are just so excited that you can’t wait, the refrigerator is okay to use. Just make sure that the mold lays flat. You can cool your soap in the freezer, but don’t leave it there for more than 15 minutes. The freezer can cause your soap to sweat, so avoid the freezer if you can.

**Removing soap from your molds:**

Removal of the M&P soap from the mold can be difficult if you are not using a flexible mold such as candy or soap. A word of advice is prior to pouring the M&P mixture into your mold; grab a cooking spray (any brand will work) and lightly spray a paper towel or kitchen towel. You do not want to dampen the towel with spray, just a light coating. Then, take the towel and gently wipe the inside of the mold. This will help in the popping out process once the M&P soap has hardened. It is also advisable to wear surgical or latex gloves; this will prevent any fingerprints from showing up on the soap. However, if you do get fingerprints on your soap, don’t fret. A small bit of rubbing alcohol on a cotton swab will erase any finger flaws.

If your M&P soap contains glycerin, it should be packaged immediately after removal from any mold. By doing so, you are avoiding any possible condensation which may show up naturally on your new soap. This is due to the hydrophilic nature of glycerin which often absorbs moisture in the air. Shrink wrap is a great way to package soaps; this prevents your soap from sweating.

**Labeling your Melt and Pour Soap:**

**Soap Regulated by the Consumer Product Safety Commission**

1. Name of Soap
2. Net Weight of Soap (not including the weight of the packaging material)
3. Name of Company, Address of Company
Soap Regulated by the Food and Drug Administration (FDA)

1. Name of Soap
2. Net weight of Soap (not including the weight of the packaging material)
3. Directions for safe use
4. Warning statement when necessary
5. List of ingredients in descending order of predominance
6. Name and location of business

Added bonus to your new awesome creations, they are ready to use once the soap has cooled and hardened, this usually takes about two hours. Talk about Fun, Fast, and Easy!

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