

Milk Paint



Milk paint, a pleasing alternative to traditional oil-based paint, and especially latex paint for your painted projects...



My favorite painting technique for country furniture is milk paint. Not the latex stuff that some manufacturers are labeling as "milk paint"; but, *real* milk paint. Properly applied it will give your primitives an authentic look that cannot be replicated using the latex or acrylic pretenders.

In the early history of this country, before commercial paint was readily available, our ancestors used milk paint to finish the utilitarian pieces they made from "secondary wood" such as pine and poplar. The milk paint they used was made at home from curdled milk, quick lime, and various earth pigments for color. Milk paint was (and is) easy to make and could be whipped-up as needed. It is easy to apply, and is incredibly durable. If you have ever tried to strip milk paint using a commercial stripper you are very much aware of this last milk paint attribute.

The milk paint recipe below is typical of those used by our eighteenth and nineteenth century ancestors.

To one gallon of curdled milk add two ounces of quick lime. Add the lime slowly as it will react with the milk and produce much heat.

To this mixture add brick dust, finely milled, stirring constantly until the desired color is achieved.

Allow the mixture to sit for a few minutes then stir frequently during use.

I strongly advise against making your milk paint following this recipe. Quick lime is a dangerous. It is caustic and the heat generated can cause severe burns if it gets on your skin. If you decide to try your hand at making your own milk paint please substitute hydrated lime for the quick lime to reduce the risk of being burned.

Obviously this recipe is for red paint—the pigment is finely powdered brick dust. Other colors are obtained by substituting different “earth” pigments. It is far easier to ***purchase the milk paint*** in powdered form, ready to mix with water. **Hardwood Lumber & More...** is an authorized dealer for The Old-Fashioned Milk Paint Company. I have used their products for a number of years and am very happy with the results.

For a new milk paint look

What you will need:

- Milk paint in the color of your choice
- Distilled water for mixing the milk paint
- Synthetic kitchen sponge or plant mister to pre-wet the surface prior to painting
- Synthetic brush, paint pad, or paint roller (can also be sprayed)
- Boiled linseed oil (BLO)
- Gum turpentine
- Lint free rags or paper shop towels

Prepare the surface to be painted by sanding thru 220g. Sand until scratches left by the previous grit have been removed. Then brush, vacuum, or wipe the surface with a shop towel dampened with mineral spirits to remove all sanding debris before switching to the next grit.

Immediately before you begin to paint dampen the surface by lightly spraying or sponging water over the area to be painted. On large projects work in sections so the surface will not dry before you can apply the first coat of paint. By pre-wetting the surface you enable the milk paint to spread easier and more evenly. The wet surface keeps the wood from drawing moisture out of the milk paint causing it to dry too quickly. You can apply milk paint with brush, roller, paint pad, or spray (I don't like foam brushes because they don't hold enough material thus requiring too many trips to the container. This creates "dry spots" since it is difficult to keep a wet edge.) With all application methods other than spraying, don't be surprised by some minor “streaking”, this is to be expected. Simply get the milk paint on as evenly as possible and allow it to dry. When the first coat is dry (about 1 hour) lightly sand with 320g and apply a second coat. Do not pre-wetting before the second coat.

Milk paint is very durable; however, it is prone to water spot. You can eliminate this tendency by “sealing” the freshly painted surface with oil after the paint film is completely dry (4-6 hours). I prefer a mixture of boiled linseed oil (BLO) and gum turpentine (that's real turpentine, not mineral spirits/paint thinner) in a ratio of five-parts BLO to one-part turpentine. Turpentine has a longer "open-time" than mineral spirits/paint thinner giving the thinned oil longer to penetrate the milk paint finish before the thinner evaporates. Brush this mixture onto the surface and allow it to set for about 15 to 20 minutes, then wipe away the excess. Wait about 30 minutes more and buff the piece dry with a soft, lint free cloth. The buffing action will “burnish” the paint film and somewhat increase the sheen. The oil, when cured, will “seal” the surface against water spots. The piece should not be placed in service for a day or two in order to give the oil time to sufficiently cure. DO NOT apply the oil mixture to the inside of casework as the objectionable odor will linger for a very long time and will permeate any cloth items stored inside.

If you need a more durable finish film (Kitchen or bathroom) then substitute an oil/varnish blend for the thinned BLO. The oil/varnish blend contains varnish and will give the painted surface a bit more protection. If you add too much varnish the piece will begin to exhibit too much sheen and the look of the milk paint will be lost—when using milk paint you want a “flat” look.

To apply a distressed finish using milk paint

What you will need:

- Milk paint in the colors of your choice (need two)
- Water-soluble dye, brown to gray-brown
- Dark brown gel stain
- Wax candle or block of paraffin wax
- Distilled water for mixing the milk paint
- Synthetic kitchen sponge or plant mister to pre-wet the surface with dye prior to painting
- Synthetic brush, paint pad, or paint roller (can also be sprayed)
- Boiled linseed oil (BLO)
- Gum turpentine
- Lint free rags or paper shop towels

Begin by preparing the surface as described above. Then, applying some “age” to the wood. Start by creating a little appropriate “physical damage”—just don't over do it; you risk making the piece look contrived. I suggest that you mentally “live” with the piece before you arbitrary begin to apply distress marks. For example, when you open a door, drawer, or lid, make a mental note of *how* you do it. Consider those areas where you are inclined to touch the piece; how do you grasp pulls, latches, and edges? These are the areas that will be most worn over time. When you walk up to the piece is there an

area that you “touch” with your feet? This area would also become damaged, and the paint film would be worn away. In other words, carefully consider the impact of daily use as you plan your distressing.

I believe that “random” gouges and dings produced by keys, and other miscellaneous “junk” thrown against the surface produce the wrong kind of damage in the wrong places. A little bit of this sort of damage is fine; but, too much looks “counterfeit”. In short, this sort of “child’s play” distressing produces a piece that literally screams “FAKE”! It is far better to give the process some thought and then take the time and do it right than to simply launch into a tantrum of destruction. How out of place will key dings and holes produced by an ice-pick be if such damage were unlikely to have occurred in daily use? If, for example, a dry sink was likely to have been damaged by setting a water-filled bucket heavily on the lid, how does poking the lid full of worm holes advance the deception of age?

Prepare and have at the ready both milk paint colors. I prefer two different, yet complementary colors; or, two noticeably different concentrations of the same color. I apply the lighter color or concentration first. You can also tint the second color to give your piece the look of a new, less faded coat over an older, faded coat of the same color. For example, a bit of blue added to red will give a deeper, warmer color when applied over a red only first coat, thus giving the first coat a “faded look”.

Before the paint is applied we must also “age” the wood. We certainly don’t want “new wood” to be revealed in areas where the paint has been worn away by use. This is a simple process in which we will combine the application of water-soluble dye with the pre-wetting step above. Remember, milk paint spreads easier and does not dry too fast if we lightly dampen the wood immediately before we paint. So, in this step we will use water-soluble dye mixed in the appropriate color and concentration for the wetting agent. Spray, sponge, or mist the surface with a brown tone water-soluble dye mixed about 1/3 to 1/2 the usual concentration. Then, after the dye has dried to the point that the surface is “damp”, apply the first coat of milk paint. Again, on large surfaces work in smaller areas. Don’t worry about irregular application of the dye—it won’t be seen anyway, except where the paint is “worn away”.

As you apply the first coat immediately remove as much of the milk paint as you can from those areas where the paint will have been worn away. You want to do this while the paint is still wet, so work on the fly. Coarse burlap makes an excellent “wiping rag” for this operation. I’m not talking about the civilized “washed burlap” used to cover bulletin boards. I’m talking about Biblical burlap; the stuff of “*sack cloth and ashes*” commonly used for feed sacks. When you are happy with the look allow the first coat to fully dry.

Now, it’s time to apply the second coat. This is the “newer” and probably darker, less faded coat of paint on the piece. We want it to be the prominent color; but, we also want the first color to show through in appropriate areas. We also want this coat to be much more “continuous” in its coverage, so we want the film to be more uniformly applied.

This means we will have less time to pause to wipe off the paint to expose the first layer. So, let's explore a new technique. We will "contaminate" the first coat with wax in those areas where we want to be able to easily remove the second coat of milk paint. Using a wax candle or a small chunk of paraffin wax, *lightly* deposit a bit of wax where you want the second coat of paint to be worn away. We will remove the wax later with mineral spirits.

Now, apply the second coat of milk paint. Just as you did with the first coat, work the same worn areas with burlap. Expose a somewhat larger area this time so that you can see the original area that is worn bare, plus just a bit more so that the first coat "peeks" out from under the second. Also, pick a few other areas where the second coat is worn just thin enough for the first coat to offer a "hint" of color through the second coat of paint. When you are happy with the look allow this coat to dry.

After the paint has dried for several hours dampen a shop towel with mineral spirits and wipe away the wax. Mineral spirits is a solvent for wax, but will not harm the milk paint.

To protect your work from water-spotting, and to add "patina" to the piece, apply the same oil mixture that we applied to the new milk paint finish.

Finally, to complete our deception, after the oil (or oil/varnish blend) has cured for two or three days, go back over the entire piece with a thin layer of dark brown gel stain, which you will apply as a glaze. Apply the glaze by wiping on a thin film in a circular motion, making sure to force the gel stain into all of the damaged areas. It is important to keep the stain application thin. Then, using a clean lint free cloth or paper shop towel, immediately begin to wipe the glaze off again. Leaving a buildup of glaze in those areas that would not have received a lot of handling. In areas where the piece would have been worn clean, wipe away as much of the glaze as you can. You may want to dampen the rag or shop towel with mineral spirits to remove even more of the "dirt" and "grime". Done properly, the glaze will fill the physically damaged areas with "dirt". Use a "thick" gel stain. The varnish binder will hold the pigment in place and no further topcoat will be necessary.