



Instructions

Milk Paint is a protein based paint, which is best used on porous surfaces such as bare wood or unglazed pottery. If the surface you wish to paint is already sealed or has a finish on it, you must either strip the finish or use "Extra-Bond". (see "Painting Sealed Surfaces" below.)

*** Always prepare a sample first***

Mixing Paint:

Only mix the amount of paint you intend to use within a 24 hour period, as Milk Paint will not keep indefinitely in a liquid form.

1. Stir compacted powder. Measure equal amounts of powder and water into separate containers. (reseal unused powder immediately)
2. Slowly add powder to the water and mix well, for at least 3-5 minutes. Milk Paint has a naturally gritty texture. The longer you mix, the creamier and smoother the Milk Paint will become (See "Hints" Section). Once the paint is thoroughly mixed, you are ready to paint.

Painting Bare Wood: (Prepare a sample first)

1. Wipe down the item to be painted with a wrung-out wet rag to remove any dust and dampen the surface. (See "Hints" section if piece has been stripped of old paint or finish.)
2. Use a foam or bristle brush. Apply the paint, following the wood grain, working the brush back and forth for uniform coverage. Keep paint well mixed as it settles. Wait one hour or until the paint is dry, before applying the next coat. Full coverage usually requires 3 coats.
3. Once the last coat has dried for a few hours, or better yet, overnight, you can sand it down to a smooth surface (see "Texture" below) or skip right to sealing (see "Sealing" below).

Texture - Smooth or Rough

1. If you prefer a finish with a super smooth look and feel, with maximum wood grain showing through, sand the surface after each coat of paint. A faster approach is to sand only after the last coat giving a smooth, but differing character finish. Conversely, if you prefer the look and feel of the natural Milk Paint texture, you may only need minimal sanding. We prefer any of these options for sanding:

- a. 220 grit sandpaper (for flat surfaces)
- b. Scotch-brite pad
- c. #0000 steel wool (for turnings - in dark colours only)

2. For a "New" look, be careful not to sand through the paint on the edges. For a worn "antique" look, sand through the edges, around knobs, latches or anywhere normal wear would occur. At this stage you can correct any errors: too much wear can be painted over and drip marks can be sanded out.

Painting Sealed Surfaces

Extra-Bond is a water borne acrylic, which, when added to your first coat of Milk Paint, gives greater adhesion to non-porous or previously painted surfaces. In essence, Milk Paint with Extra-Bond creates a Milk Paint primer. It is environmentally safe and non-toxic.

Two rules should always be followed when using Milk Paint with Extra Bond. First, make sure the surface is perfectly clean, and second, prepare a complete test sample of the Milk Paint (with Extra-Bond added) on the same surface material to ensure adhesion and "look".

Preparing Sealed Surfaces:

1. Scrub the surface to be painted with a degreasing agent such as T.S.P. (Tri-Sodium Phosphate - wear proper protection) making certain to remove any wax, dirt and grime. Ensure you rinse the surface with clean water to remove any residual degreaser.
2. Sand the surface lightly to remove any sheen, and to provide an etched surface for the paint to adhere to.

Painting Sealed Surfaces

1. Paint your first coat using Extra-Bond mixed with the Milk Paint. (Follow mixing instructions on the Extra-Bond label.)
2. The second and third coats do not require Extra-Bond, as Milk Paint will always bind to itself. Only mix the amount of paint, with Extra-Bond, needed to complete one coat. The paint for subsequent coats can be mixed as per mixing instructions for unsealed surfaces above. Unused paint, mixed with Extra Bond, can be mixed in with your second coat.
3. Once the third coat has dried overnight, you can sand the Milk Paint to a smooth surface (see "Texture" above) or skip right to "Sealing" (see below). Clean up any undried Extra-Bond with soap and water.
4. If you choose to use a sealer at this stage, wait at least 12 hours. Please read carefully the following section on "Choosing Sealers".

Choosing Sealers:

We highly recommend you seal the Milk Paint. Unsealed Milk Paint is porous and will watermark, and absorb dirt and grease.

Each different sealer has its own special characteristics. When applied over Milk Paint the results can vary greatly, in terms of depth of colour and effect. We strongly suggest you prepare a test sample with your choice of sealer, to ensure you will achieve your desired effect.

Effects of Different Sealers on Milk Paint

Oil based urethanes soak down through the Milk Paint deepening the colour (as per the "oil & wax" colour on the colour chart). They are generally self levelling and leave a smooth, consistent finish. Please be aware that some oil-based urethanes, applied over Extra-Bond, may weaken the finish. If you plan to use oil based urethane, test an area first to ensure adhesion is not compromised.

Water based urethanes do not soak as deeply into the Milk Paint resulting in a lighter, softer, more powdery colour. The actual colour will be somewhere between the colour of the Milk Paint powder and the colour on the colour chart. Water based urethanes applied by brush tend to show lap marks, have a slightly more plastic look, and may leave a streaky finish. Spraying urethane can improve finish quality.

Lacquer, if sprayed initially with tack coats, will seal the surface to keep the light natural powdered colours of the Milk Paint. Building up further coats will provide a smooth consistent finish.

Danish Oil and other finishing oils act like oil based urethane by deepening the Milk Paint colour. Various oils will also build up a beautiful, buffable surface finish as well. Do not use oil over Extra-Bond as it may weaken the finish.

Paste Wax is usually applied over top of the previous finishes to give a beautiful hand rubbed look, and added protection. If applied directly over Milk Paint, it can result in a somewhat splotchy effect.

Sealing Process For Oil & Wax Finishes

Once you have sanded the Milk Paint as smooth as you want, wipe the dust off with a tack cloth or a cloth slightly dampened with mineral spirits. Apply your first coat of oil liberally, with a brush or rag, to all surfaces, including back and underside of your piece. (We recommend Danish Oil, but any other finishing oil, such as teak or tung oil, will do.) After 10-15 minutes, wipe the surface down with a clean, soft cloth to remove excess oil. Wait 12 hours between each coat of oil. We prefer three coats for a rich patina, but three coats are not required. **CAUTION:** Dispose of oily rags properly, out of doors, as they can spontaneously combust.

Let the last coat of oil cure for a minimum of 12 hours, if you wish to apply a paste finishing wax. The wax can be applied using #0000 steel wool or a clean cloth (note that steel wool can leave grey marks on the lighter Milk Paint colours - test before using). The steel wool will smooth any rough surfaces missed during sanding. Rub in the direction of the wood grain, to avoid any fine cross-scratching. Wait 20 minutes and buff with a clean cloth. Oil & wax finishes should be maintained over the years, oiling every 1 to 2 years, and waxing when necessary. This will create a beautiful and rich patina over time.

Sealing Process For Water or Oil Based Urethanes

This finishing process is less involved than oiling and waxing, but permanently seals the surface. Prepare a sample first, following the instructions on the urethane can, and as with the oil, urethane all surfaces. Any popular brand of urethane will work.

Hints, Notes and Special Effects:

Mixing Hints - Use a hand mixer, blender or a drill with a paint mixer, if available, but mix on low speed. Mixing too vigorously causes the paint to foam up. A little foam on the surface is natural, however, if the paint turns entirely to foam throw it out and start again, slowly. Mixing the paint by hand can be done, but it takes longer, and tends to be more difficult to create a homogeneous mix. If the paint is not mixed well, it may be lumpy and apply in a streaky fashion. The longer you mix, the creamier the Milk Paint will become, and the less final sanding may be required. Remember to clean all your tools immediately, as the dry paint is very difficult to scrub off.

Smoothest Surface - Sanding the painted surface with 220 grit sandpaper between coats will help smooth any grain raising and give a very smooth surface prior to sealing.

Worn and Aged Look - For oil based finishes, use "Burnt Umber" artist's oil paint (it comes in a tube). Rub it into the areas where the Milk Paint has been sanded off to give an "aged wood" look. Use the burnt umber immediately after wiping down your last coat of oil finish, and use the oil as a thinner or eraser for the umber. For water based finishes, use acrylic burnt umber diluted with water. Practice on a sample first.

Custom Colours - You can blend any of the Milk paint colours to create new ones. Adding a small amount of acrylic pigment can broaden the colour range. Don't add too much or the adhesion will be affected.

Colour Variation - Milk Paint is a crude product, made by hand. Milk Paint colours will vary from batch to batch due to slight variations in the natural earth materials. The final finished colour will also depend on the type of sealer being used and how it is applied. Please create a test sample to ensure you attain your desired colour and effect. If you wish a broader palette, you can mix any of the Milk Paint colours together, but note down your recipe, so you can recreate the colour. For lighter colours, start with one of the whites and add colour to suit your preference. For darker colours, add a small amount of Pitch Black.

Two-Tone Finish - Paint your first two coats in one colour, and paint the next two with another colour. When you are sanding down, you will expose the undercoat and achieve a beautiful layered, two-tone effect.

Stencilling or Wash Effect - You can use Milk Paint for stencilling, just add less water to your mix. You can also create a wash or a wiping stain, by adding more water. Experiment with a sample first.

Settling - Milk Paint components are heavy and when the mixed paint is left to stand, these components tend to settle out at the bottom of the container. Therefore, occasional stirring is required.

Evaporation - Milk Paint is hygroscopic, i.e. the casein (the milk binder) slowly absorbs water as it sits in solution. Also, if used outside on a dry summer's day, the water will evaporate quickly. Add water as necessary to keep up the consistency of your mixed paint.

Exterior Use - We do not recommend unsealed milk paint for exterior use as it can water spot and mildew in the rain. However, exterior oil-based finishes, such as Spar Varnish, will seal the paint.

Storing Mixed Paint - If you need an extra day to finish your project, add 5 -10% more water to the mixed paint, stirring it in well. Cover the container with "plastic wrap" - pushing the plastic onto the surface of the paint and removing any air. Leave your paint in the refrigerator over night. In the morning, remix your paint for 3-5 minutes, bring it to room temperature and you are ready to go. We do not recommend mixing the paint in advance of using it, as it will generally not keep past 24 hours.

Stripping Paint - Most commercial paint strippers contain some wax to slow the evaporation of the stripping agents. The wax remains on the surface, even after you have scraped off all of the stripped paint, and it must be completely removed prior to painting. Sanding will only push the wax further into the wood's grain. Scrub the stripped surface with a commercial wax stripper or a degreasing agent such as T.S.P. (Tri-Sodium Phosphate - wear proper protection) making certain to remove all wax, dirt and grime. Ensure you rinse the surface with clean water to remove any residual degreaser. P.S. Milk Paint is not easily stripped by any commercial paint stripper.

Shelf Life & Warranty

If the paint powder is kept in a dark, dry environment, it should last for a long time. We recommend storing unused powder in its original package or placing it in a small airtight container, with as little air as possible. If it is exposed to light, air or dampness for any period, the casein breaks down and starts to smell of ammonia. If this happens, the paint won't adhere properly and, if applied, will powder off. If your paint has "gone bad", do not throw it out. You can mix 2 parts new paint with 1 part old and still create a perfect finish.

Thousands of satisfied users attest to quality results using our paint. However, shelf life is not unlimited. We will warranty our paint for up to 6 months from date of packaging, returned in it's unopened, resaleable original package, accompanied with proof of purchase.

If you have any questions or concerns, please do not hesitate to call us Tuesday to Friday from 10:00 am to 5:30 pm, or Saturdays from 10:00 am to 5:00 pm EST at (416) 364-1393 or email: mail@nittygritty.ca