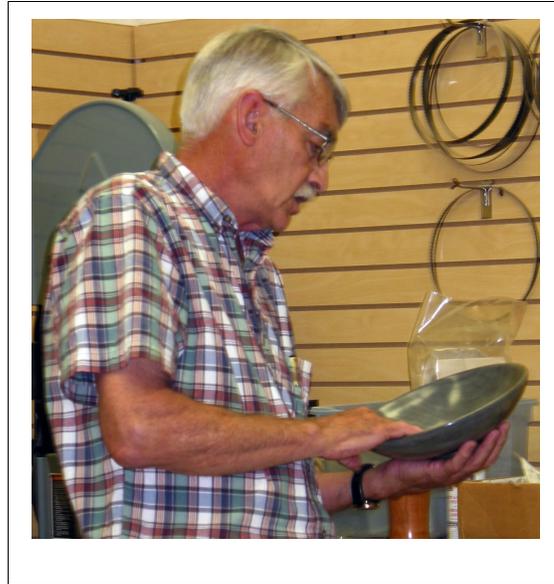


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Ferrous Acetate for Producing Grey Wood Surfaces.

Jim Oliver

Since there has been a little interest in the grey finished I've achieved with ferrous sulfate, and since not everyone has or wants to deal with ferrous sulfate, I've summarized a little kitchen chemistry that works perfectly well and achieves the same result. It involves making a solution of ferrous acetate from steel wool and vinegar (it's the ferrous ion that's important; whether it's as an acetate or sulfate is immaterial). Similar procedures can be found on the Internet and in miscellaneous publications, and are sometimes referred to as ebonizing.



Place about $\frac{1}{4}$ of a pad of fine (0000) steel wool in a container (empty yogurt container, baby food jar, whatever). Slowly pour vinegar onto the steel wool until it is more-or-less saturated and there is a thin layer of vinegar over the bottom of the container (don't immerse the steel wool completely). Cover loosely or not at all (you don't want to completely exclude air) and allow to stand at least overnight. Fold a piece of a paper towel so that it fits into a small funnel (a coffee filter would probably work fine too). Use several small portions of water in succession to transfer the liquid portion of the dark mixture through the filter and into a second container (a final volume of filtrate of about 20 mL (2/3 ounce) is fine; this volume is not very critical. The resulting light brown solution, probably still containing a few small particles because of the porosity of the paper towel, is ready to apply to your wood. I use a $\frac{1}{2}$ inch paintbrush, but a rag, cuetip, or anything else will work as well. Brush the solution liberally onto the wood and allow it to dry. Darkening of the wood surface should be evident within a few minutes. [An alternative is to directly rub the wood with the dark, rusty steel wool pad. This is messier, and applies insoluble iron oxide along with the soluble iron acetate.]

A second application is optional. Often, since the wood grain is raised a bit from application of the water solution, I sand the dried work with 220 grit sandpaper, make a second application of the ferrous acetate solution, and, after the wood has dried a second time, sand with 320 and finer grits as appropriate. I typically apply several coats of water-based polyurethane finish after the second sanding.

Let me stress the necessity of good housekeeping while working with these materials. Keep all other projects well away. Clear a work area, spread a newspaper, and keep everything on the newspaper until you're finished. Thoroughly wash your hands, gloves, glassware, paintbrush, etc., and pick up and throw away any paper towels, sandpaper, steel wool, etc. before turning to another project. A small splash or smudge on another piece will produce a larger sanding job than you will enjoy doing.