

# General Finishes Comparison Chart OCT, 2007

<b>PROPERTY</b>	<b>WATER</b>	<b>GEL OIL</b>	<b>LIQUID OIL</b>
<b>NO.OF COLORS</b>	16	11	15
<b>MEDIUM, ODOR &amp; CLEANUP</b>	Water based, low order, water and soap cleanup.	Oil based, perfume added, medium smell, mineral spirit cleanup.	Oil based, solvent smell, mineral spirit cleanup.
<b>DRY TIMES</b>	<ul style="list-style-type: none"> <li>• 2-4 hours under ideal conditions: 72°F and 70% humidity.</li> <li>• Application temperature range is 60°F to 90°F</li> <li>• Temperatures over 80°F with low humidity will accelerate dry times.</li> <li>• Humidity over 80% will moderately slow dry time.</li> <li>• Do not use at temperatures below 60°F.</li> </ul>	<ul style="list-style-type: none"> <li>• 6-8 hours under ideal conditions: 72°F and 70% humidity.</li> <li>• Overnight is best</li> <li>• Application temperature range is 60°F to 90°F</li> <li>• Temperatures over 80°F with low humidity will accelerate dry times.</li> <li>• Humidity over 80% will slow dry time, but not as much as liquid oil base. Using a fan at slow speed will accelerate drying.</li> <li>• Temperatures below 60°F will slow dry time by as much as 12 to 24 hours..</li> </ul>	<ul style="list-style-type: none"> <li>• 6-12 hours under ideal conditions: 72°F and 70% humidity.</li> <li>• Overnight is best</li> <li>• Application temperature range is 60°F to 90°F</li> <li>• Temperatures over 80°F with low humidity will accelerate dry times.</li> <li>• Humidity over 80% will slow dry time by as much as 12 to 24 hours. Using a fan at slow speed will accelerate drying.</li> <li>• Temperatures below 60°F will slow dry time by as much as 12 to 24 hours.</li> </ul>
<b>BUILDING COLOR</b>	<ul style="list-style-type: none"> <li>• Good color build with each coat.</li> <li>• Dye/pigment combination produces deep, dark colors.</li> <li>• Most flexible finish for color customization.</li> <li>• Custom colors can be created by mixing any two shades of water based products.</li> <li>• Topcoats can be tinted.</li> <li>• Good for antiquing with glazes, faux finishes, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Best color build with each coat.</li> <li>• Produces darkest, richest colors.</li> <li>• Pigment/urethane gel formulation greatly reduces blotchiness in aspen, maple, and pine.</li> <li>• Top coats optional but recommended.</li> </ul>	<ul style="list-style-type: none"> <li>• The least color build – second coat does not darken much.</li> <li>• Colors are not as rich as water and gel.</li> <li>• As the thinner oil base finishes penetrate the wood more, they will bring out more variation and blotching on aspen, maple, birch, and pine.</li> </ul>
<b>TOP COAT COLOR</b>	Water based top coats are milky white in the can, dry to a clear finish, and will amber very slightly throughout the life your project.	Oil based top coats have a slight amber color in the can, and dry to a clear finish which will darken over time.	Oil based top coats have a slight amber color in the can, and dry to a clear finish which will darken over time.
<b>FADING</b>	Least fade resistant. In strong sunlight, the stains' pigments and dyes will fade just like carpeting or fabric.	<ul style="list-style-type: none"> <li>• Most fade resistant. In strong sunlight, the stains' pigments will fade, maybe not as much as the water based.</li> <li>• Top coats will amber more than water based products over time</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate fade resistance. In strong sunlight, the stains' pigments will fade, maybe not as much as the water based.</li> <li>• Top coats will amber more than water based products over time.</li> </ul>
<b>PROPERTY</b>	<b>WATER</b>	<b>GEL OIL</b>	<b>LIQUID OIL</b>

<p><b>APPLICATION AND LEVELING</b></p>	<ul style="list-style-type: none"> <li>• Shortest open time.</li> <li>• Dries the fastest, allowing a stain and top coat to be applied on the same day.</li> <li>• The surface must be kept wet while working, and immediately wiped, one section at a time. <b><u>Must use generous amount of stain.</u></b></li> <li>• EF Extender will extend open time.</li> <li>• Brush application only, not rags. <b><u>Paint pad applicators are strongly recommended</u></b> because they lay down such a generous, uniform coat of stain.</li> <li>• Most flexible topcoat that levels out beautifully.</li> <li>• Use good quality paper towels to wipe off stains.</li> </ul>	<ul style="list-style-type: none"> <li>• Moderate open time. Second and subsequent coats glide on easily.</li> <li>• Sanding between coats is optional.</li> <li>• Re-wets easily with application of more product.</li> <li>• No splashing, dripping or running.</li> <li>• Can be applied with brush or rag. Gel is more topical than liquid. It stays on surface (no penetration) so excess stain must be carefully wiped off.</li> <li>• Each coat must be evened using the applicator. A polishing motion with a <b>clean</b> paper towel works well.</li> <li>• Must use bristle brush to remove stain from corners.</li> <li>• Use good quality paper towels or clean cotton cloth to wipe off stains.</li> </ul>	<ul style="list-style-type: none"> <li>• Longest open time.</li> <li>• Best leveling properties of all three types.</li> <li>• Can drip or run if not wiped down properly.</li> </ul>
<p><b>GRAIN RAISE</b></p>	<ul style="list-style-type: none"> <li>• Water based products produce more grain raise. On most woods, this is not an issue because the standard sanding of the top coats will remove any grain raise without an extra step.</li> <li>• On solid oak, (not veneer), minimize by spraying the project with water or rubbing down with a damp cloth. Allow the wood to dry and then sand lightly with #220 sandpaper to remove the raised grain.</li> </ul>	<p>Almost non-existent grain raise.</p>	<p>Very little grain raise.</p>
<p><b>LAP MARKS</b></p>	<ul style="list-style-type: none"> <li>• The semi-gel formula is designed to be fairly thick so that the product sits on the surface of the wood, rather than penetrating. It dries quickly, so lap marks are a possibility, usually caused by not using enough stain to thoroughly wet the surface of the wood.</li> <li>• Lap marks can be repaired by re-wetting and re-working the surface, but not as easily as gel oil base.</li> <li>• <b>The surface must be kept wet while working, and then wiped off evenly.</b></li> </ul>	<ul style="list-style-type: none"> <li>• Gel urethane formulas are very thick and can lap if excess stain is not wiped off within five minutes. Gel re-wets very easily thus minimizing lap mark problems.</li> <li>• The finishing project should be divided into sections.</li> <li>• The surface must be kept wet, and the excess wiped off.</li> </ul>	<p>Difficult to lap because of longer open time.</p>
<p><b>PROPERTY</b></p>	<p><b>WATER</b></p>	<p><b>GEL OIL</b></p>	<p><b>LIQUID OIL</b></p>

SHELF LIFE AFTER OPENING	<ul style="list-style-type: none"> <li>• One year plus.</li> <li>• Stain colors tend to lose intensity after one year.</li> <li>• Top coats last longer.</li> </ul>	<ul style="list-style-type: none"> <li>• One year plus</li> <li>• Good in-can stability.</li> <li>• Topcoats may oxidize and thicken if exposed to air.</li> </ul>	<ul style="list-style-type: none"> <li>• One year.</li> <li>• Pigments will settle and eventually harden.</li> </ul>
CURE TIME	Allow the final Top Coat to cure for a period of 14 days to reach optimum hardness. You may use your furniture sooner. Just treat it with special care during the curing period.	Allow the final Top Coat to cure for a period of 14 days to reach optimum hardness. You may use your furniture sooner. Just treat it with special care during the curing period.	Allow the final Top Coat to cure for a period of 14 days to reach optimum hardness. You may use your furniture sooner. Just treat it with special care during the curing period.
MAINTENANCE	<ul style="list-style-type: none"> <li>• Wash surface with a damp washcloth and wipe dry.</li> <li>• Cleaners such as Pledge (containing silicone) are not recommended.</li> <li>• Paste wax is not recommended because it builds up and yellows, thus becoming a maintenance problem.</li> <li>• Top Coats may be recoated at any time in the future. Remove any grease or dirt, lightly sand with #320 or finer grit sandpaper, and then apply another coat.</li> <li>• Do not use any cleaner with ammonia on water base.</li> </ul>	<ul style="list-style-type: none"> <li>• Wash surface with a damp washcloth and wipe dry.</li> <li>• Cleaners such as Pledge (containing silicone) are not recommended.</li> <li>• Paste wax is not recommended because it builds up and yellows, thus becoming a maintenance problem.</li> <li>• Top Coats may be recoated at any time in the future. Remove any grease or dirt, lightly sand with #320 or finer grit sandpaper, and then apply another coat.</li> </ul>	<ul style="list-style-type: none"> <li>• Wash surface with a damp washcloth and wipe dry. Cleaners such as Pledge (containing silicone) are not recommended.</li> <li>• Paste wax is not recommended because it builds up and yellows, thus becoming a maintenance problem.</li> <li>• Top Coats may be recoated at any time in the future. Remove any grease or dirt, lightly sand with #320 or finer grit sandpaper, and then apply another coat.</li> </ul>
SPONTANEOUS COMBUSTION	No	Yes	Yes
WOOD SPECIES NOTES	<ul style="list-style-type: none"> <li>• As a topical, semi-gel formula, water base works especially well for woods that penetrate easily, such as pine, maple or aspen, producing a more even looking finish</li> <li>• Parawood must always be sanded thoroughly with #120 to remove the factory applied sealer.</li> <li>• Long grained <b>solid</b> woods such Oak will have increased grain raise. Pre-spraying with water is recommended.</li> </ul>	<ul style="list-style-type: none"> <li>• Parawood must always be sanded thoroughly with #120 to remove the factory applied sealer.</li> <li>• Works well on all other woods</li> </ul>	<ul style="list-style-type: none"> <li>• Parawood must always be sanded thoroughly with #120 to remove the factory applied sealer.</li> <li>• Due to the penetrating nature of liquid oil base products, they can cause blotching on aspen, maple or pine. Use a pre-stain conditioner to minimize this problem. Sand hard woods (maple and birch) with no finer than #120 to allow wood to accept stain.</li> </ul>