



FINISHING

Presentations to May 2013 FWWA meeting:

Oil Varnish Wax (Sam Maloof formula)

Two pack lacquer

Cabot's polyurethane

Livos Oil

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WHY USE THE SAM MALOOF FORMULA?

- ❖ I like the look of oil based finishes.
- ❖ Issues have been found with the durability of Danish Oil.
- ❖ I was really taken by the Maloof rocking chair in the *Australian Wood Review* (Issue #69, p 20).

The Ingredients



RECIPE BASE COAT

Mix equal parts of:

- ✓ Boiled Linseed Oil
- ✓ Raw Tung Oil
- ✓ Semi gloss Urethane Varnish

FINISH COAT

Heat equal parts of:

- ✓ Boiled Linseed Oil
- ✓ Raw Tung Oil
- ✓ add shredded Beeswax until the mix is consistency of heavy cream.



The Product

PREPARATION

- ❖ Remove any excess glue.
- ❖ Sand timber starting at 100 and going through all the successive grits to 400.
- ❖ Burnish using 0000 steel wool.
- ❖ Buff using a clean rag/cloth.



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OIL VARNISH WAX
(SAM MALOOF FORMULA)



APPLICATION BASE – 3 COATS

- Apply generously.
- Rub the mixture into the wood with a rag until your hand starts getting hot.
- Ensure you remove any excess and leave overnight.

FINISH – 3 COATS

- Apply with a rag rubbing into the surface like you would with a polish.



WARNING
Never leave your oily rags
lying around the shop.
They will combust, so
dispose of them with care.

PROS

- ✓ Relatively easy to apply.
 - ✓ Deep satin finish.
- ✓ Doesn't appear to darken with age.
 - ✓ Repels water.
- ✓ Reasonably scratch resistant.
- ✓ Doesn't mind dust landing on it during the finish process.
 - ✓ Easy to repair.

CONS

- ✗ Takes a week to apply –3 x base plus 3 x finish coats, each 24 hours drying time.
- ✗ Oily rags are combustible.
- ✗ Initial coat darkens timber.
- ✗ Not available on the shelf in Australia that I am aware of. Rockler make and stock it in the United States.
- ✗ Highlights glue and scratches.
- ✗ Some ingredients difficult to source.



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OIL VARNISH WAX
(SAM MALOOF FORMULA)



WHY I USE A TWO PACK LACQUER

- ❖ Low toxicity (compared with other lacquers).
- ❖ Relatively easy to use.
- ❖ Gives a beautiful smooth gloss finish.

WHAT IS IT?

Becker Acroma two pack acid catalysing lacquer. Details on the web [here](#).

GLOSS FINISH

DC810 Clear Gloss Topcoat –
100% gloss with 60% solids.

- ❖ Things that are to be handled – it is tougher than pre-cat lacquer.
- ❖ “Aesthetic” things that look good with a high gloss.

SATIN FINISH

DM307 Care E1 Clear Multicoat –
30% gloss with 44% solids

- ❖ Furniture. I think that a satin finish (30% gloss) is better.

PROS

- ✓ If you are not a spraying genius it is very forgiving.
- ✓ 10min touch dry – 30min sand & recoat.
- ✓ Each coat dissolves the previous coat so no laminations or lifting.
- ✓ If the “final” coat is not 100% – use EEE as a cut & polish.

APPLICATION

I use a cheap (\$50) HVLP gravity feed gun. I don't think that a better gun would give a better result (at least for me).

- Prepare surface by sanding to 400 grit.
- Mix 10:1 (lacquer:hardener).
- Dilute 40 – 50 % - depends on timber, temperature.
- Sand to 400 between coats.
- Usually only 2 coats.
- Can apply extra coats to completely fill the grain if desired.

CONS

- ✗ Because it is a two pack you have to make up a batch.
- ✗ As a result you often have some left over.
- ✗ Has a shorter pot life than pre-cat lacquer.
- ✗ Usually OK for 7 days if stored properly.

WHERE TO BUY IT

- ❖ Galvins in Osborne Park.
- ❖ Twenty Two Service in Neerabup.

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TWO PACK LACQUER



WHAT IS IT?

Cabot's Cabothane Clear Oil Based clear polyurethane – Gloss, Satin, Matt.

More information on the web [here](#).

WHY I USE POLYURETHANE

- ❖ Time consuming but resistant to wear and surface marks, and gives a flat closed surface.
- ❖ For me French polish isn't durable enough, and oil finishes leave an open grain surface, which I don't like.

PREPARATION

- ❖ I start sanding with 120, more usually 180, 240, then 320 grit.
- ❖ I damp the surface with water to raise the grain, using old shirt material, so as not to leave material fibres in the grain.
- ❖ Once dry, (over night) a final sanding with 320 grit.
- ❖ Small surfaces – boxes, clocks etc I start with a cork block, but I like a harder block to make sure the surface is flat and edges aren't rounded.
- ❖ I use abrasive paper attached to a longer sanding 'stick' with double sided tape for the 'mating' surfaces of box lids etc.
- ❖ On large flat surfaces I use an orbital sander. I may start with 180, more usually 240 through to 320 and 400. Taking care not to round-over the edges.
- ❖ I use a wire brush to un-clog the abrasive paper and extend its life – more so with hand sanding.

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CABOT'S POLYURETHANE

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APPLICATION

- Thin the first coat with around 10% turps.
- I use a squirrel hair brush. It's permanently suspended in a jar of turps. with the brush handle sticking up through a hole in the jar lid.
- Always stir the varnish.
- I wipe the brush out on a lint free cloth before use. Then I make sure the brush is loaded by dipping in varnish and wiping on the edge of the tin a few times. This ensures not too much turps is left in the brush, which would thin the coat.

- Long sweeping brush strokes, trying not to go over the surface too many times.
- I like to leave coated surface horizontal while it dries, to prevent runs.
- Leave over night to dry – 10 hours or so.

DEFECTS AND BLEMISHES

- ❖ On open grain areas or 'holes', I spot fill the defects with a small brush, cutting back and repeating until filled.
- OR
- ❖ I use super glue. It sets hard and sands down well.

CUTTING BACK*SMALL ITEMS*

- The first cut back is with 240 grit.
- Subsequent coats are cut back with 320 grit.
- I use small pieces of abrasive paper around 70 mm x 50 mm
- Again I use a wire brush to un-clog the paper and extend its life.
- I use a fine brush to dust the surface before applying the next coat.

LARGER ITEMS

- I use an orbital sander with 400 grit or finer.
- After a few coats, and as the surface builds, then 1200 grit discs.
- Discs are from the 'sand paper man' – [here](#) on the web. They are of excellent quality, last well and don't clog.
- I cut back between every coat with 1200. You can apply some pressure using 1200 without fear of going through the finish!

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CABOT'S POLYURETHANE



APPLICATION (CONT'D)

- Once grain and 'holes' are filled then the surface starts to build up, and you get a flat surface.
- I usually apply 5 or 6 coats, depending on the grain. Some times many more – particularly with marquetry which may have fine gaps!
- The longer between coats the better, even a week or more gives the polyurethane chance to shrink in to gaps. Subsequent coats then fill the 'lines' and build up a flat surface.
- An orbital sander with 1200 grit allows you to apply some pressure without going through the surface.
- When satisfied leave to harden for a week or so, before final sanding and waxing.

FINAL SANDING**SMALL ITEMS**

- I work through 400, 600, 800 and 1200 on a hard block, usually finishing with 0000 wire wool along the grain.
- OR
- I use abrasive pads on a hard block – Green, Grey to White.

LARGE PIECES

- Doors, table tops etc I use the orbital sander with 1200/1500 grit.
- ❖ Use of an angle poise light while sanding enables me to detect hollows and areas not cut back.
- ❖ I might finish with 0000 wire wool.

WAX POLISH

- I apply wax, usually with '0000' wire wool.
- If there are lots of mouldings I use a cloth to save going through the finish on the sharp edges.
- Leave wax to harden a few hours, then buff with a clean lint free duster, or I find tee-shirt material is very good.
- Usually I will give the surface 2 or 3 coats of wax.

WARNING

Never leave your oily rags lying around the shop. They will combust, so dispose of them with care.



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CABOT'S POLYURETHANE



WHAT IS IT?

ARDVOS Universal Wood Oil #266

It is imported and distributed by Livos Australia – information on the web is [here](#).

NOTES

- ❖ Livos oils, and most other oils, are not suitable for commercial veneers, however it is very good on hand cut veneers.
- ❖ The sample used in the presentation was a piece of veneered board. I used the Livos oil on it but this is not the best finish for this kind of material.
- ❖ I also used KUNOS Countertop Oil #243, another Livos product [here](#) on the web, on the sample for the presentation. This is slightly glossier and will give a more water proof finish to tops.
- ❖ I prefer using the Ardvos oil on most of our furniture.

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PREPARATION

- ❖ Sand the item, going through the grits to 600 or finer if wanted
- ❖ Remove excess dust

APPLICATION

1. Apply a coat of oil with either a brush or rag.
2. Leave for about 15 to 30 min, depending on the weather, and remove all excess oil with a clean cloth.
3. The next day lightly sand item with 600 paper and apply another coat of oil, repeating number 2.
4. Apply another coat of oil the next day with a rag – no need to sand back unless the finish feels rough – and repeat number 2.

This should be all that is needed for most items of furniture – we apply 3 coats of oil on most of our furniture.

Keep applying coats if you require a heavier glossier finish on say a box lid.

You can buff the finish with the buffing pads that Festool sell to use with their sander. This will give a lovely finish.

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LIVOS OIL

