

MODEL PAINTING

APPLICATION

Fundamental to any good model is the quality of the paint job, and fundamental to any good paint job, is preparation. Depending on the condition of the finished work, preparation may have to start with fillers for large cracks, holes, etc. Plastic Wood sets up rather slowly, shrinks and sands hard. It is not, therefore, recommended for use in soft woods, as surrounding areas sand down first. It is waterproof. It is also lacquer-based and therefore flammable. I prefer epoxy putty and hardener which is suitable for deep filling, sets fairly fast and sands hard. It is non-toxic, strong and waterproof. Acrylic paste is another suitable alternate.

The next critical step is the use of a sanding sealer to fill wood grains or prevent paint absorption. I find Deft works best. It too is lacquer-based and flammable. Best for filling and sealing hard, close-grained woods like poplar, cherry, etc. It dries quickly and sands nicely. Whatever you use, remember that the value of a sealer is in the sanding between coats with fine grit paper.

Next, a primer can be applied to fill sanding marks, grain and provide adhesion for the final finish. Whether to seal and prime, or do just one, will depend on the wood porosity and the finish quality one wishes to achieve. As an extreme example, if you were working with balsa trying to simulate a high quality aluminum surface (aircraft), it would be advisable to do both. At the other end of the scale, if you were working with a hard, close-grained wood, sealing only would probably be sufficient. If you elect to prime, use a product compatible with the finish coat. For example, if you are using a Floquil solvent paint, use their primer #110009 which comes in light gray. For metal, priming is especially important for adhesion and chip-

resistance. Solvent-clean all surfaces if not already sanded. Sanding gives a good anchor pattern, i.e., the paint grabs better. All paint manufacturers I know of provide metal primers. Any good grade auto primer such as Rust-Oleum also works well. For styrene, or any of the plastic family, acrylics can be applied directly without primer. However, some solvents may not be compatible. It is advisable therefore to test first with the finish paint. If not compatible, check with the paint manufacturer and use their recommended primer. If there is evidence of crazing (small surface cracks) in the unpainted styrene, use Floquil Plastic-Prep, or equal, an anti-static and cleaning agent.

If we exclude two-part epoxy paints and the "thane" products, paint products fall into 3 broad categories. Predominant of these are the acrylics. Non-toxic and quick drying, they are especially good on flexible parts such as line, cloth and rubber, etc. Airbrushing is best as it otherwise tends to show brush marks. Careful, it may raise grain if applied to bare wood. Solvents, once the top seed, still abound, but have distinct disadvantages to acrylics. They require more drying time and of course are toxic. Ventilation, therefore, is a must. Hardly worth mentioning are the lacquers. They are very fast drying, toxic and require repeated coatings. Careful, they present a real compatibility problem with many other products, so test, and test again. They offer very little advantage except if you are building say an R/C Budweiser racer where a deep glossy finish is the order of the day.

Some application guidelines to keep in mind. Always test the compatibility of any filler, sealer, primer or finish on scrap first. Test product-to-product and product-to-surface. If in doubt, consult the manufacturer and use a single supplier system insofar as possible. Allow dust to settle in the work area and tack cloth surfaces to be painted. Ideally, you would want plenty of space so that you could set up a separate ventilated painting "shed".

ALWAYS provide ventilation when using solvents and lacquers. Paint components off the model for sharp definition. Remember, when it comes to paint for miniature applications, it pays to stay with paint formulated for miniatures. In this way you will be able to fully capture even the finest details. The main reason for this is that miniature paint contains pigment particles that are very finely granulated. Thus, you will not clutter details with globs of paint as might be the case with regular paint. In dealing with flat surfaces, obviously one has more latitude as pigment size is not as critical. If you do hand brush, it is advisable to paint quickly and work in one direction to spread evenly. Get enough paint on the brush for it to flow easily to the surface. Do not over-brush as it will leave streaks and show ridges. Rule of thumb for brush selection: flat brushes for flat work; round brushes for rounded areas.

Masking can be done with any of a wide variety of tapes available. Select a "low tack" tape to minimize the risk of pull-off. Another option is latex liquid mask.

Airbrush versus hand brushing? Airbrushing in my view wins hands down! The main advantage is that it captures even the finest detail. If you are in doubt, try hand brushing the model of an ocean liner in 350:1 scale and observe loss of detail. The key here is putting on as little paint as possible while building color depth. Small parts can be set on a piece of double-sided tape to avoid being blow away during spraying. Good lighting is a must to see the areas sprayed. Another big advantage is that multiple coats can be put on in 10-15 minute intervals. Presto, the job is done! A final gloss coat can be applied in a similar way. For a modest investment and with A LOT of practice you will be able to improve one of the most important steps in model making. Nothing can show off a model better, or make it look worse, than the paint job!

FLOQUIL UPDATE (1999)

The following summarizes the status of the RPM Company including Floquil which has undergone several major changes.

The RPM Company is made up of several subsidiaries all of which serve the modeling community. If we look at miniature paint only, there are three divisions, namely, Testor Model Master, and more recently Floquil-Polly S Color Corporation. Floquil-Polly has not gone out of business! When RPM bought out Floquil they decided to restructure the Floquil line to better fit the overall synergy of their product line.

As a result, four paint categories have been discontinued. The Floquil Marine Colors, Military Enamels and FloStains have been dropped due to a lack of market activity and because there was significant color duplication with paints offered by the new sister companies. Underlying this is the industry trend away from oil-based paints to non-toxic acrylics. In addition, the Polly S line has been eliminated in favor of the new upscale Polly Scale line. Therefore, any of the discontinued paint that you might find on hobby store shelves is merely residual stock that will not be replenished. So if there are colors that you might need to match on an existing model or one in progress, better get to your local shop for that last jug.

All, however, is not lost. Chances are you will be able to find an equivalent color within the RPM family. For example, those of you involved with US Navy ship modeling may be disappointed to hear that the commonly used Haze Gray #818594 (5-H), previously of the Marine Color line, is no longer available. However, Haze Gray is available as part of the Polly Scale line. Another example, the commonly used Anti-Fouling Red #818614 can be replaced by Polly Scale Italian Camo Brown 2, #505286. Hopefully it's better than the Floquil Anti-Fouling Red which does not dry dead flat as an anti-fouling should.

Incidentally, the Floquil Railroad Enamel colors as well as their specialty products and brushes remain pretty much intact.

Insofar as inquiries, your best bet is to call 800-435-2942 or fax 800 962-0045. Ask for Luis Nace, x4088. If he cannot help he will put you in contact with someone who can. Their Internet address is <http://www.testors.com>. The mailing address is:

The Testor Corporation
620 Buckbee Street
Rockford IL 61104

Hope this is helpful in your paint selections. And please remember, when it comes to paint for miniature applications, it pays to stay with paint formulated for miniatures. In this way you will be able to fully capture even the finest details. The main reason for this is that miniature paint contains pigment particles that are very finely granulated. Thus you will not clutter up details with globs of paint as might be the case with regular paint. In dealing with flat surfaces only, obviously one has more latitude as pigment size is not as critical. Remember too that your paint job can be further enhanced by air brushing rather than hand brushing. The key here is to put on as little paint as possible and air brushing is the clear favorite.

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