

Andy Sephton
produced this guide to
using Aerokote.



AEROKOTE

FUEL PROOFING AND FINISHING YOUR MODEL

ANDY SEPHTON WORKED WITH JOHN BRISTOW OF DELUXE MATERIALS TO PUT TOGETHER THIS GUIDE TO USING 2-PART MIX AEROKOTE FUEL PROOFER

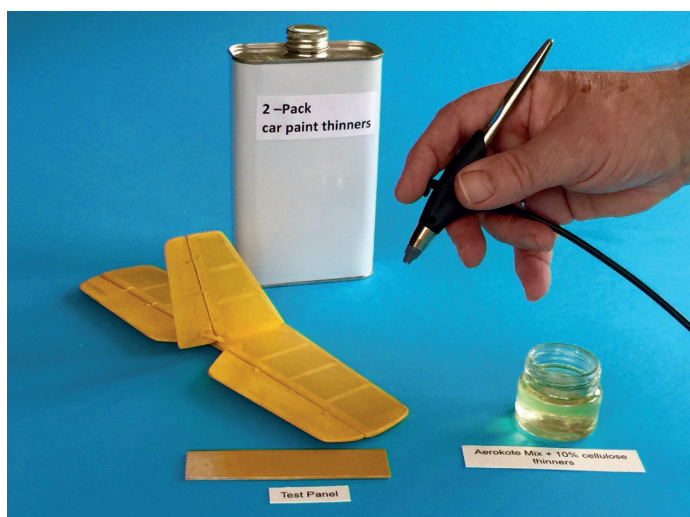
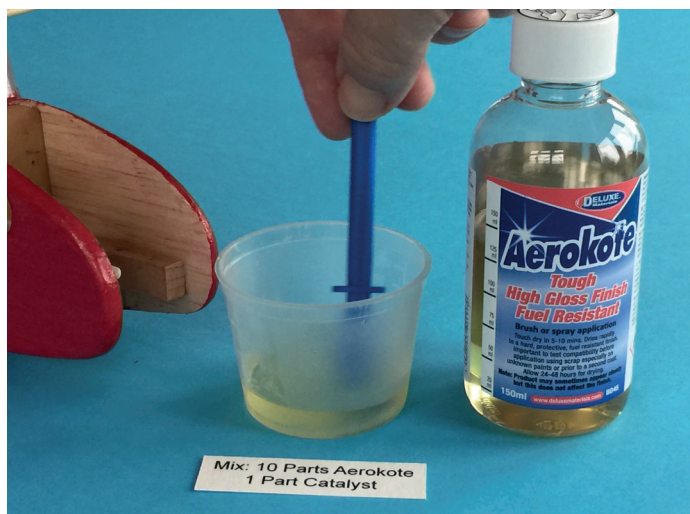
Obtaining a high-quality gloss or authentic matt finish can be the make or break final stage of a model build. Aerokote is a tough, high gloss, 2 pack, fuel resistant lacquer. It's designed for brush or spray application, primarily over bare balsa or hardwood. The finish is so good that it is used in the jewellery trade but this product has been developed for modellers. It is touch dry in 5-10 minutes to deliver a high gloss, dust free finish. The product fully cures to a resistant

finish to repel hot alcohol, gasoline or kerosene containing high nitro methane, as well as mineral, castor, synthetic ester, or poly-glycol synthetic oils.

In this article we hope to answer some typical questions by taking you through the main stages of application:

- How can it be applied for best results?
- Will it work over paint?
- Will it work over covering film?
- What thinners should I use?





Preparing the Mix

The Aerokote pack comes as a 150ml bottle, and 25ml bottle of catalyst. The complete bottle will cover approx. 1sqm of hardwood (less for more porous balsa) The correct ratio is 10 parts Aerokote to 1 part catalyst and the ratio should be adhered to as with epoxy glues. Adding more catalyst does not make it set more quickly. Using less will mean that it does not fully set.

To make measuring easy, the Aerokote container has 25ml increments and a dropper pipette with 0.5ml increments is supplied to measure the catalyst. So, for example 2.0ml of catalyst should be added to 20ml of Aerokote lacquer in a clean polythene or glass container.

Mixing the catalyst

Mix the catalyst with the Aerokote until it goes clear and allow it to stand for a few minutes before applying. Work at room temperature.

Remember: Always test on scrap material with the same surface before application. Ensure surfaces are clean, dry and that any paint is fully hardened especially when applying by brush. Best applied with an airbrush using a light dusting coat, allowed to dry (min 4hrs) followed by further coats to build the required finish. When second coating, don't forget to re-test the application over the first test coat on your scrap test-piece.

Brushing

Use a soft haired brush to apply the lacquer to the areas that need fuel proofing. Do not over-fill the brush and do not over brush when applying the Aerokote to the model.

Tip: The brush can be cleaned with cellulose thinners and/or revived with Deluxe Materials Brush Magic.

Spraying

Aerokote can be sprayed. Use a light dusting coat first, building up over successive coats. It is essential to test on scrap material over paints and especially if applying a second coat. Thinning for spraying can be by cellulose thinners or by thinners designed for use with 2-pack car paints, again try a test mix first for spray viscosity and stability, and to check base finish compatibility. Do follow normal safety precautions for spraying by ensuring good ventilation and wear a face mask.

- Mixed catalysed Aerokote can be stored for about 24 hours in a closed container and remain useable.
- Aerokote needs no more than 10% thinners for successful use in some air brushes.

Covering Film

A single coat of Aerokote can be successfully applied over most covering films and paints, but do check on scrap film or paint and when applying a second coat. Even if you don't want to completely coat your film covered model, putting a line of Aerokote over the film overlaps around the IC engine bay can help prevent fuel ingress and the film lifting.

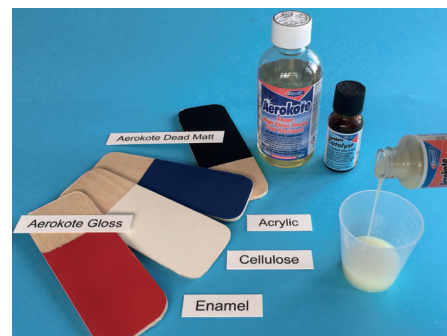
Trim Tape

Sticky plastic trim tape is often applied to models finished in more traditional materials such as tissue. A coat of Aerokote

Practical Products

INFO:

Priced at around £9.50 Aerokote is distributed to all good hobby shops through distributor Ripmax in the UK.
www.deluxematerials.co.uk



will ensure that the trim is fuel proofed. Loose Monokote trim used on this KK Bandit fuselage was sealed successfully with Aerokote.

Matt Finish

There is matting agent available (Make it Matt) that can be blended into Aerokote to control the final finish from satin to dead matt by varying the amounts of matting agent.

Note the matting agent is not used on its own but in conjunction with Aerokote. Follow the instructions on the pack and table below but make sure the amount of hardener is 10% of TOTAL MIX. i.e. (Aerokote + Make it Matt) x 10% = amount of catalyst hardener.

Finish required: Volume of Make it Matt added to 50ml of Aerokote gloss.

Gloss	Satin effect	Dead matt
nil	10ml	20ml

Test panels were finished with several coats of Deluxe Materials Sand 'n' Seal, then painted with Humbrol Enamel, Tamiya Acrylic and Halfords Car Cellulose. Once dry they were given 2 coats of Aerokote. All except Sand 'n' Seal were sprayed.

Tip: We suggest it is best to wait several days between first and second coat on certain paint finishes to prevent reaction. Acrylic, enamel and cellulose paints were re-coated successfully at about 24 hours but do test on scrap surfaces before committing specially.

Application to Foam Models

Aerokote can be successfully applied to EPO and EPS foam models. It acts as a surface improver and primer to which paint will adhere better. Several coats of Aerokote can successfully

seal the small gaps between the 'pockets' of foam to give a lovely finish.

Tip: If you don't know the type of foam, test on some scrap foam before committing. Aerokote is not for blue, pink or white EPS/Styrofoam (i.e. Expanded Polystyrene) which are sometimes used by Foam model manufacturers.

Some Hints and Tips

- How do I avoid brush marks? Answer: Don't over brush and use multiple coats applied with a soft brush, sanding with fine grade wet'n'dry between coats if required.
- Store Aerokote in a cool dry place. The catalyst has the shortest life typically 6- 12 months so that is especially important to keep cool.
- Always measure and mix fully before use. Test on scrap before committing to a model or when over coating.
- Make sure surfaces are dry and clean.
- Don't mix Aerokote in a metal container. A glass jar is best with a tight lid.

Questions and Answers

- Why is the finish not drying? Answer - There is too little catalyst or it is too cool. Remedy - Try spraying a coat of over-catalysed Aerokote in a small area (5:1 mix) to see if that cures. Increase heat and ventilation.
- I have blistering or fish eyes. Answer - the surface is contaminated and maybe needs stripping e.g. silicone contamination
- The finish is not glossy? Answer - poor quality thinners or it's too humid.
- There are bits on the surface? Answer - It is drying too slowly or you have the wrong thinners. Use a tack rag to clean the surface before finishing and ensure your work area is clean.