

Notes on Nitrate Dope

The following notes were published in the Fall 2005 Capital Area Antique Modelers Association newsletter, Jim Coffin, Editor

I used some Sig Nitrate a few years back expecting it to tighten up the silk on a model I was covering. I put on several coats and got no shrinkage. You know, when all else fails, read the directions. I read the label and found it wasn't supposed to shrink! Heckfire, I thought all nitrate dope shrunk so long as it wasn't labeled non tautening. In Sig's case I was wrong. I've had some interesting adventures with nitrate dopes from various suppliers. I used Aerodyne nitrate in both tautening and nontautening varieties for quite a while. Shrinkage was good, but the Aerodyne frequently turned a sort of maple syrup brown in the can after just a short time. That happened so often that I finally stopped using Aerodyne unless I was going to subsequently spray a dark color over the dope. I have two or three gallons of Craftaire Nitrate dope (non tautening) that are now several years old and are still quite clear. I went to Aircraft Spruce and Specialty about 6 months ago and bought a quart of Certified Nitrate Dope. Within 4 months it had turned maple syrup brown. I've now bought a couple of quarts of Randolph High Solids Nitrate dope; it's only a couple of weeks old, but it's clear and it certainly shrinks very well. Aircraft Spruce and Specialty stocks both the Randolph and the Certified Nitrate Dopes. At this rate, I'm probably going to settle on the Randolph Nitrate Dope and either buy in small quantities just before a big doping spree (I tend to have several models at a time under construction, getting them all to the covering stage at about the same time), or keep looking for a dope that stays clear over time. Of course like most FF modelers who deal in "dope" and tissue or silk, I'm hoping that the DEA doesn't get the wrong idea about what I'm talking about.

Mike Myers

I hate to tell you this but George Aldrich told me before he died that SIG Nitrate and Butyrate are both modified urethanes, thanks to the EPA. According to George, Randolph and Brodac are the only dopes currently available that are truly nitrate and butyrate. Try to thin some of the butyrate with an old thinner from the 80's. Our club bought some nitrate from government surplus that is real nitrate and shrinks good. Ever try to shrink with urethane? I get my nitrate from the local airport that caters to the EAA types.

Homer in Seattle

(PFFT Ed Note: I had the same experience with nitrate turning maple color in the can. It apparently attacked the metal in the can. Before it got worse, I bought a bunch of quart mason jars and poured it out of the can into the jars and it hasn't gotten any darker. Unless you are doping something white, I doubt if you can tell the difference.)