

More on Cyanoacrylate Glue

by Mike Nassise

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Now that you've read Chris Starleaf's article on the benefits of using super glue for building models, this next piece on the storage and handling of cyanoacrylate adhesives should expand your knowledge of their properties even further. I came across this very useful information in the "FM Clinic" section of the Nov '05 issue of Flying Models. It was sent in by Charles Smith, of Bob Smith Industries and it's info that every modeler who uses cyano glue should be aware of. Incidentally, if you're not a regular reader of Flying Models, you really should be. As far as I'm concerned, it's the only model mag published in the country that provides excellent coverage of the free flight scene. Every issue is well worth its cover price.

Here's the essence of what Mr. Smith had to say. "... the best way to store unopened bottles of CA for long periods of time is in the refrigerator or freezer, as long as it is done correctly. We have seen CA maintain over 95% of its properties after more than four years of storage in a freezer. Moisture can work its way through the plastic that CA bottles are made from. The greater the wall thickness and purity of the plastic of the bottle, the longer this process takes. That is why even good CA will have a short shelf life if put into a cheaper bottle." (Editor's note: The implication here is that generic brands of CA are often packaged in inferior containers which leads to a more rapid degeneration of their adhesive properties when stored over long periods of time. In other words, another example of the old adage that you get what you pay for.)

"For long term storage, CA bottles should be wrapped in aluminum foil or put into a plastic freezer bag to form an additional moisture barrier and put in the low-humidity drawer of the refrigerator. The increased shelf life that is obtained from storage in a freezer vs. a refrigerator is small; therefore, we recommend the refrigerator since CA can be used after only minutes from being taken out of storage. When you need CA it is usually right now, so waiting for it to thaw out from a deep freeze can be frustrating. Open bottles of CA that are used weekly should not be kept in a refrigerator. This is when condensation can occur inside the bottle. Just preventing open bottles that are used often from getting warm (not exceeding 75 degrees Fahrenheit) is the best rule to follow."

Certainly information worth knowing from Mr. Smith. It also makes Chris Starleaf's use of small tubes of name brand CA (Duco) when building models seem like a very wise approach. Obviously, buying small quantities for your immediate needs, then using it up quickly as you build avoids all those nasty storage problems mentioned above. If you run out of glue, a quick trip to the local Wal-mart or hardware store will have you back in business in no time flat. I don't know about you, but I'd rather focus my attention on keeping my favorite beverage stocked up in the refrigerator than my super glue.