

Safety First – CA Glue Dangers (Gary Guenther)

Let's talk a little bit about CA. CA is our acronym for cyanoacrylate glue – you may call it “super glue”. CA is a turner's best friend. I can't begin to go into all of the uses here, but let's just say things like glue blocks, stopping cracks in green wood, gap filling with sawdust or coffee grounds, as a finish, etc. The point here is that if you use it for any of those things, you should also consider the dangers, which are also many and insidious. I will consider them in two general categories that I will call “contact” and “vapor”.

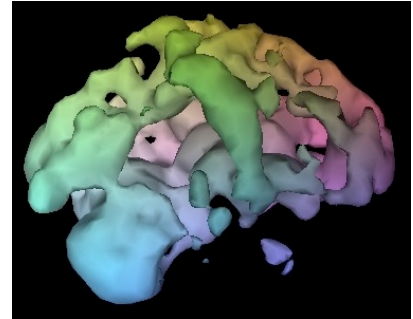
I'm sure you've heard many “funny” stories about people gluing their fingers to various objects or to each other. It's not as funny when you do it to yourself – it can be downright annoying, if not dangerous. You have to be really careful with the stuff because it is cured by moisture and is exothermic (gives off heat when it cures). If a lot of it cures on your wet skin quickly, you can get a nasty burn. Don't Ask Me How I Know. The “thin” kind is used specifically because of its very low viscosity, and, because of that, it can be all over you in a second, and you won't know how it happened. Again, DAMHIK! I now have a rule that I won't open the bottle before I put on nitrile gloves on both hands, no matter how “impossible” it is that I might get some on myself – because I know I always do anyway.

This stuff will glue your blanks to the workbench and your fingers to each other in a second – or to something else (like the glue bottle). Hint: burp the bottle on every use (away from yourself!) and keep the spout scrupulously clean with a paper towel. If you haven't yet learned to wear nitrile gloves, don't panic when you glue your fingers (after the burning stops) and don't fight it. If you do, you'll just tear off your skin. Relax, count to ten, and take your time. Hopefully what you just glued yourself to is portable. (In case it isn't, you should purchase and always have handy, and within reach, a small bottle of “debonder” such as acetone. Remember, I warned you.) If you glue your fingers together, or to something else, just put the affected area in water and soak for a bit. Patience! The glue will slowly let go with no ill effects to you. If you're in a rush, use acetone, but that's not good for your skin or you lungs. Please note that all this is before you go near a lathe!

Using CA glue on a rapidly-spinning piece of wood is certainly a major escalation of the dangers. Needless to say, if we are using CA as a finish on a spinning piece of wood, it can and will be sprayed and splattered all over the place. We often use CA because it wicks into cracks. We spritz it with accelerator and get back to turning. Guess what – it probably only cured on the surface and may still be liquid farther down, just waiting to be released when you cut through the top layer. More spray and splatter! I have speckles all over my face shield and smock. Wonder how they got there? You would be foolish if not be wearing a full face shield, or at the very least, a set of tight-fitting safety goggles. This was explained to me by a turner who said that when he found specks of it on the *inside* of his normal glasses, he knew it had gotten too close to his eyes. He also mentioned that you don't want to experience the chemical burn of CA on your eyeball -- it is one of the most painful things he ever endured.

If you get CA specks on your goggles or safety glasses, glass or plastic, don't worry – you can get it off safely. I've been told that no solvents or scraping are necessary -- just soak your glasses in water overnight, and you should be able to rub the specks right off.

Now listen to this part very carefully. CA fumes cause brain damage. Since we tend to ignore such warnings, let me say it again. Hello! CA fumes cause brain damage! This is very dangerous, nasty stuff. Use it only in a well-ventilated area or outside or get a respirator rated for such things. A self-help PBS TV show about keeping your brain healthy highlighted the plight of a man who got a job as a furniture finisher. After a while, his wife started noticing a change in his personality but didn't immediately correlate it with the job change. Five years later, the guy, and their marriage, were in bad shape. Long story short, he got a brain scan, and they found his brain fried. The obvious connection is with the chemical fumes associated with wood finishes. CA is worse than most of them!



We all KNOW this to be true, but, speaking for myself, I have been known to be impatient and "cheat" occasionally and work with inadequate ventilation. This is a Safety Violation! I'm willing to bet that a lot of you cheat too. Note to self: don't. It's a well-known fact that our senses are tuned to identify differences or changes. If you smell anything for more than a short time, you will no longer smell it. That doesn't mean it's not still there frying your brain.



We only get one brain, and it doesn't heal very well, if at all, from injuries. You have to protect it every day by simple expedients such as ensuring proper ventilation when using CA and all solvents. If you don't have full ventilation, there are also masks and respirators available that are rated to protect you. You can do the research.

Why do we always have to learn the hard way? We don't! Take this article to heart and try to avoid my mistakes, and those of others, before they happen to you! That's the whole point of Safety First!

The bottom line is that CA glue is a very helpful and valuable tool for woodturners, but there are dangers in its use, contact and no contact, that can be moderated through recognition, acceptance, planning ahead, and proper care.