

CA Glue and Accelerator Safety and First Aid

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- What follows is not intended as medical advice and is neither an exhaustive, nor comprehensive compilation. It is basic information gleaned from numerous sources intended to raise awareness about the safety issues present when using cyanoacrylate (CA) glue and accelerator. You should always seek immediate medical assistance if in doubt, and you should always research any areas where you need more information.
- All woodturners are individually responsible for their own safety and any medical treatment required as a result of any accidental injury.

CA glue and CA accelerator are inherently dangerous because of their chemical fumes and the fact that the glue sticks anything together, requiring debonder to unstick, or 3-4 days to separate from the skin. It is especially dangerous if it gets in your eyes.

CA Glue and Accelerator Safety Tips:

- 1 Always wear safety glasses (not a faceshield because it concentrates the fumes) when applying and working with CA glue and accelerator.
- 2 Always have good ventilation and air flow when using CA glue and accelerator. Vapors may cause headache, fatigue, nausea, irritation of nose, throat and airway, difficulty breathing and coughing.
- 3 NEVER USE A POWER RESPIRATOR when using CA glue or accelerator as the respirator will suck in the fumes, concentrating them and making them even more dangerous. Woodturning respirators DO NOT filter out chemical fumes! (This same caution applies to paint, varnish, lacquer and solvents.)
- 4 Always wear gloves if the glue will come in contact with skin.
- 5 Always have a bottle of commercial debonder or acetone on hand.
- 6 Always point the bottle nozzle away from you when squeezing out glue in case it squirts on first pressure.
- 7 If you apply CA glue to a workpiece on the lathe, stand aside when you first restart the lathe in case some of the glue has not dried, as it will fling out, possibly onto your face or into your eyes.
- 8 Most accelerators contain Hexane and n-Hexane, which are highly flammable and toxic. Avoid breathing the vapors and use in a well-ventilated location, away from ignition sources. It is better to use a hand pump instead of aerosol spray to apply accelerator, as the latter disburses as a mist, putting many more small particles into the air, thus making it easier to get into your lungs, or to ignite. If you have any pulmonary/bronchial disease, CA accelerator can be hazardous to your health and cause serious emergency situations. In high concentrations, vapors are narcotic and may cause headache, fatigue, dizziness and nausea. For those with flammability concerns, Permabond makes a non-flammable accelerator.

- 9 Always wash hands thoroughly after using accelerator to avoid getting residue in the eyes or mouth.

First Aid for CA Glue Accidents

1. If the CA glue bonds to your skin, eyes or mouth, never try to pry apart the affected areas. This will result in certain injury. Treat according to the techniques in (9) below.
2. If the CA glue coats, but does not bond skin, remove as soon as possible using the techniques in (9) below.
3. CA glue on your skin may cause contact burns as it cures. If a burn occurs, treat according to first aid guidelines for burns, depending on the severity.
4. If you get CA glue in your eyes, seek medical attention immediately. DO NOT try to pull your eyelids apart if they are stuck together. NEVER use debonder or acetone, or any other solvent in or around your eyes.
5. If lips are accidentally stuck together, apply warm water and encourage maximum wetting and pressure from saliva inside the mouth. Peel or roll the lips apart. Do not try to pull the lips apart with direct opposing action. If separation does not occur, seek medical attention.
6. Eyes irritated by fumes from glue or accelerator should be thoroughly rinsed with warm water for at least 10 minutes. If pain, blinking or redness persist, seek medical attention immediately.
7. If you experience difficult breathing while using CA glue, immediately go outdoors or to a well-ventilated area. If breathing does not quickly return to normal, seek emergency medical attention. Thoroughly air out your work area before returning to work.
8. To remove CA glue from skin, use a commercial debonder, acetone, or nail polish remover solvent. Apply the solvent to the affected area and gently peel back the joined surfaces from each other as the glue softens. NEVER use debonder, acetone or any other solvent in or around your eyes or mouth. If no solvent is available, immerse the affected part in warm soapy water or vegetable oil. Once the glue begins to soften, then slowly, gently begin to peel apart the connected skin. Repeat soaking as needed until the glue is soft enough to easily separate the connected skin.
9. CA glue will quickly polymerize in the mouth, making it nearly impossible to swallow liquid glue. It may take a day or more to release from the mouth surfaces as saliva softens it for release. Do not swallow the released pieces of dried glue. If ingestion is extensive, seek medical help immediately.

First Aid for Accelerator Accidents

1. If accelerator gets in your eyes, rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention if pain, blinking or redness persists.
2. If accelerator is ingested, rinse the mouth with warm water. Do NOT induce vomiting. Obtain emergency medical attention.

3. If you experience difficulty breathing while using accelerator, immediately go outdoors or to a well-ventilated area. If breathing does not quickly return to normal, seek emergency medical attention. Thoroughly air out your work area before returning to work.

For further information:

- <https://info.aronalpha.net/blog/ethyl-cyanoacrylate-adhesive>
- <https://www.dovemed.com/healthy-living/first-aid/first-aid-cyanoacrylates-poisoning/>
- <http://www.miracleglue.com/firstaid.htm>
- <https://chestnutproducts.co.uk/wp-content/uploads/2016/07/Cyanoacrylate-Superglue-Thick.pdf>
- <https://www.doityourself.com/stry/7-safety-tips-for-using-super-glue>
- <http://www.american-niagara.com/assets/images/SDS/SDS-AC45%20CYANOACRYLATE%20ACCELERATOR-2015.pdf>