

TECH TIPS

Caution - Cyanoacrylate Adhesives and Glass Bonding

Initial observations suggest that standard cyanoacrylates are effective for bonding glass. In the absence of thorough testing, these adhesives could provide disappointing results in bonding glass over the long term.

Why does the bond degrade?

Cyanoacrylates cure especially fast on glass thus creating stresses in the bond. These stresses, the brittle nature of cyanoacrylate adhesive, and the significant difference in the coefficients of thermal expansion between the glass and the adhesive will likely create bond failure.

Is cyanoacrylate ever used on glass?

Yes, there are two types of applications that come to mind. First, cyanoacrylates work well to fixture or position glass before and while curing another adhesive type (for example a two component epoxy). Second, if stressors are low for example on very thin glass with low load and long term testing is done to ensure the normal degrading doesn't occur, rubber toughened cyanoacrylates might be possible.

What is the best option for bonding glass?

UV curable adhesives provide very fast cure and excellent bond strength. See the Glass Bonding Brochure at http://www.permabond.com/industries_served/glass-adhesive/ or contact Permabond for more information on Glass Bonding Adhesives