

**Technical Bulletin**  
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Mirror Edge Sealants

Many different mirror edge sealants are available in the marketplace today to try and prevent “black edge” from occurring. Vitro America has reviewed the MSDS sheets of many of these sealants. We have not been able to find any material in these sealants that could chemically bond with either the glass or the mirror coating. Chemical bonding is the only way we know to protect the silvering from external attack.

Most edge corrosion (black edge) on mirror is caused by exposure to strong cleaning agents, hostile environments and improper fabrication techniques. Many multi-purpose cleaners contain chemicals that are harmful to both the glass and the mirror coating. Tile cleaners frequently contain strong acids that will etch the glass and eat through any mirror coating. Edge grinding without using water or a grinding coolant will fracture the protective backing paint on the mirror and expose the silver to moisture. High humidity and salt atmosphere will always accelerate the deterioration of the silver on a mirror.

Edge sealants do not have a verifiable record of slowing or preventing corrosion from taking place. In fact, some of the edge sealants investigated contain solvents known to be harmful to the silvering and backing paint used on mirrors. Most edge sealants consist of 90% or more water and/or solvents.

The best way of avoiding edge corrosion is to use a high quality mirror and follow good fabrication and installation recommendations. Make sure that paint and sealants used near the mirror are thoroughly cured, that moisture is not trapped behind the mirror or along the bottom edge, and that proper cleaning agents are used.