

Vapor Given Off During the Polymerization of Light-Curable Adhesives

You may have noticed vapors being released during the cure of some UV light-curable adhesives.

This phenomenon is the result of a very rapid polymerization or chemical reaction that occurs during UV light cure. Both heat given off during the reaction (at the molecular level) and heat from the absorption of UV energy can in some instances result in a small amount of monomer or adhesive to emit before the adhesive has a chance to completely polymerize (cure).

Essentially, this phenomenon may emit trace amounts of the most volatile compounds listed on the material safety data sheet (MSDS). Please note that the volatilization may or may not be noticeable but is almost always a very small amount.

Good manufacturing practices for your particular process may suggest incorporating an exhaust system in the bonding area to remove the aspirated particles and vapor.