



nerej

Difference between VOC compliant and low VOC adhesives and sealants

November 24, 2009 - Front Section

With increased interest in green building and green living, it is important to understand the difference between VOC compliant products and low VOC products.

VOC, or Volatile Organic Compound, is the necessary substance used to manufacture adhesives and sealants, making them fluid and workable. Once an adhesive or sealant is applied, it cures or hardens by the evaporation of the VOC, releasing substances into the air, which is why you smell an odor as the curing happens. Commonly used VOCs include mineral spirits, toluene and xylene. Gasoline and alcohol are also VOCs.

Many states have implemented laws that restrict the use of certain VOCs believed to contribute to low-level smog and ozone depletion. Adhesives and sealants labeled VOC compliant have been reformulated to comply with these laws. Therefore these products are made with exempt VOCs, and they are made with a lower total volume of VOCs. VOC-compliant products have less of an impact upon the environment and exactly meet the requirements of these laws. VOC restrictions are on the books in 16 states and pending in at least one other to date.

VOC-compliant products are sufficient, unless the home owner prefers to use green products or the builder is striving to conform to the latest green building standards. In that case, low-VOC adhesives and sealants will have the least negative impact on indoor air quality, while also meeting all regulations. Products labeled low VOC strive to reduce the total VOC content. They are better for the environment and are approved for use around people with environmental sensitivities, like asthma. Low VOC products cost more but conform to more stringent standards while maintaining high performance.

Another tip is to look for independent third-party testing to make sure manufacturer claims have been independently verified or certified. For example, the GreenGuard Certification Program by the GreenGuard Environmental Institute provides industry-independent, third-party testing for emissions and their effect on indoor air quality. For more information on GreenGuard , visit www.GreenGuard.org.

When deciding which type of VOC product is best for your project, determine whether cost, air quality or the level of greenness is your primary concern. Lower budget VOC-compliant products comply with the laws and reduce environmental impact. Higher end low-VOC products go beyond compliance, are greener products and are better for indoor air quality.

Henkel's OSI GreenSeries Adhesives and Sealants is a Low VOC line of products, with GreenGuard Certification. Visit www.osigreenseries.com for more information.