

## Low volatile organic compound paint: Save money while saving the environment

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Many commercial and industrial clients are turning to low volatile organic compounds (VOC) paint to reflect their progressive attitude towards environmentally friendly products and practices. Educational and medical institutions were the first to commit to using these coatings, which emit minimal pollutants into the air. As the trend becomes more commonplace, clients are realizing that they can save money while saving the environment.

Paints that have low or no volatile organic compounds, are categorized as environmentally friendly because the emission of VOCs into the air is a type of air pollution. Generally, non-flat paints with no more than 150 grams of VOCs per liter (g/L) of product are considered low VOC, regardless of any lack of certification, such as one from the United States Green Building Council (www.usgbc.org), which rates and certifies projects. The USGBC follows the requirements for paint in GS-11, a regulation of Green Seal, Inc. (www.greenseal.org), a non-profit that provides science-based environmental certification standards.

Other organizations to be familiar with include the Ozone Transport Commission (www.otcair.org), a multi-state organization created under the Clean Air Act (CAA). The OTC's mission is to develop and implement regional solutions to the ground-level ozone problem in the northeast and mid-atlantic regions. OTC develops model rules for environmental air quality that pertain to the paint industry. which the states implement. The GreenGuard Environmental Institute (www.greenguard.org) is an industry-independent, non-profit organization that oversees the GreenGuard certification program. As an ANSI authorized standards developer, GEI establishes acceptable indoor air standards for indoor products, environments, and buildings.

Aren't "green" products more expensive? Sometimes, yes. Manufacturers have invested significant sums to create new formulations, and innovation can be pricey. Special ingredients - sometimes chosen because they are a sustainable resource - might also be to blame. Lastly, there is a cost to certification, branding and promoting the "green" character of a product. The low VOC products most commonly used for our clients can be purchased in large volumes for the same price as non-complying coatings; in smaller quantities, there can be a 5-25% premium.

Environmentally responsible products can save you significantly more than the extra cost they may require. In even the smallest commercial job, product cost is a fraction of labor cost - especially if you need the work to be performed after hours or within a tight deadline. Many property owners and managers elect to have work done after hours to avoid affecting the air quality and odor in a confined space. The schedule constraints are often multiplied when late night/early morning or

weekend work is limited to a short duration such as a holiday weekend or school vacation.

Low VOC paints, since they emit minimal odors, can be applied during business hours with little affect on air quality - even in a relatively small space. The client saves on overtime or after-hours labor, as well as utilities that are not be used during the down time. Facility managers, property managers, and others can monitor progress during their regular business day. Even communication is made easier, as it can be done "real time" during normal working hours.

Consider the minimal workplace disruption from another perspective, that of your employees. People sensitive to paint fumes are much less likely to be adversely affected by low or no VOC paint. Fewer complaints about the work environment, fewer requests to work from home while paints are applied...it all adds up to dollars and cents.

Here's how low VOC paint can save you money:

- \* Lower Labor Costs: paint can be applied during business hours with minimal effect on air quality
- \* Scent and Sensitivity: low or no odor products are minimally disruptive to employees

\* Real-Time Monitoring: property and facility managers can monitor paint application during regular working hours

Today's most reputable brands offer multiple selections of environmentally responsible, low or no VOC paint. It is important to know that environmental certifications may be for only a particular formulation of paint - for instance, a semi-gloss paint may be certified, while a high-gloss variety of the same brand and product is not. Benjamin Moore has numerous products that qualify for LEED certified jobs (Leadership in Energy and Environmental Design) and meet Green Seal's GS 11 standards. Their EcoSpec product is Green Seal certified, and their newest paint, Aura, is low VOC (at less than 50g/L) and uses water-based tints to minimize emissions even after coloration. Sherwin-Williams has multiple products that qualify for LEED-certified projects and meet Green Seal's GS-11 standards. The LEED Green Building Rating System does not require paint to be third-party certified. There is a wealth of information about Green Seal and LEED standards at www.usgbc.org.

Tint, or pigment, is a significant contributor of volatile organic compounds. So, the same paint can have a different amount of VOCs in one color than in another. Currently, GS-11 does not include tint into their calculations to determine the VOC level. If your goal is LEED certification, you must investigate the VOC rating after the paint has been colored.

Also, some low or no VOC paints do not accurately reflect deep or intense colors, so you should work with your painting contractor to choose the best product for your palette. VOC levels may also be different from one sheen to another, even within the same product and brand. So, when you purchase paint you've got to make a clear determination of your commitment to the environment - then, color and sheen. After that, consider duration, scrubbability, coloration and application quality, and other attributes. Aura has a proprietary technology that locks in color and helps to eliminate burnishing in dark colors.

The VOC rating of a paint product can change from color to color and from sheen to sheen. The list below includes some common low and no VOC products, but these may not be low or no VOC in all

## formulations:

\* Benjamin Moore's EcoSpec is a zero-VOC acrylic coating suitable for medical, educational, and other commercial environments. It can be used on masonry and primed or previously painted metal surfaces. Other products in the Benjamin Moore line are GS-11 compliant in certain sheens. Aura by Benjamin Moore is a low VOC architectural coating that is praised for its color intensity and unique palette called Affinity.

\*Sherwin-Williams' Harmony is a zero VOC product, and Duration Home and Builders Solution are low VOC products. Harmony is available in primer and flat, eggshell, and semi-gloss sheens. Sherwin-Williams developed the GreenSure designation to label coatings that minimize impact on air quality

\*Dulux's Lifemaster product line of is water-based, 100% acrylic paint for interior spaces. The eggshell and semi-gloss products are available in a full spectrum of colors. This line is zero-VOC without tint and meet all LEED specifications established by the US Green Building Council.

\* Pittsburgh Paints' SpeedPro is formulated to be less than 50 g/L VOC in all sheens and bases. Compliant with LEED standards, these paints are best used on walls, ceilings, primed metal, masonry, and wallboard.

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