

# Green Technology Formula™

## What Makes a Product Truly “Green”?



Welcome to the Green Technology Formula information guide. The intent of this guide is to clarify what **Green Technology Formula** intends to mean, since there is a strong false impression as to what makes a product truly “green”.

Though energy efficiency and recycling of packaging impacts the environment, the Green Technology Formula addresses specific criteria and only products or formulas that don't contain harmful ingredients or, stated differently, restrict inclusion in the formula of toxins and chemicals that are health hazard to humans and animals, or detrimentally impact the environment, such as containing ozone depleting chemicals or hazardous air pollutants.

### Defining The Standard For Green Technology Formula

The objective of Green Technology Formula is to quantify and standardize variables which must be included and/or excluded from a formula based on their positive or negative health hazard and environmental impact.

For example, a water-based polyurethane containing 5% N-Methyl Pyrrolididone (NMP) to enhance its performance properties must be deemed unqualified as a “Green Technology Product” in that NMP is a reproductive toxin causing birth defects as listed on California's Proposition 65.

#### 1. Product Must Be Truly Water-Based

The fundamental criterion for all Green Technology products is that the product must be truly “water-based”, not just water reducible. “Water-based” means that its primary vehicle is water or, its major component must be water. Furthermore, its thinner or reducer be water only.

#### 2. Contain Low Amount of Volatile Organic Compounds (VOC)

The finish, stain or product must contain less than 175 grams per liter (g/L) or less than 1.45 lbs/gallon of VOCs. As organic compounds in stains and finishes evaporate during their drying and curing process, VOCs are released into the air, affecting indoor and outdoor air quality. VOCs and their byproducts can cause a number of physical problems, including, but not limited to, eye and skin irritation, lung and breathing problems, headaches, nausea, muscle weakness, and liver and kidney damage. VOC can combine with each other, or with other substances in the air, to create new chemical compounds, such as ground-level ozone. Ozone is a major component of smog, which causes negative health and environmental impacts when present in high concentrations at ground level.

**3. Contain No Hazardous Air Pollutants (HAPS)**

Cannot contain any Hazardous Air Pollutants such as, Xylene or Toluene, in that these pollutants affect ozone depletion and contribute to smog.

**4. Contain No Toxins Or Carcinogens**

The finish, stain or product must not contain any toxins or carcinogens such as lead, mercury, phthalates (used as plasticizers), toxic preservatives, fungicides, or the aforementioned NMP.

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