

## **Air Fresheners – How fresh are they?**

We've all been there, you walk into a home or commercial building and you feel like you've been hit in the face with an overwhelming scent. Although many people think air fresheners are not hazardous because they smell good, they don't think about what's actually in them or what effect they might have. There are several different types; some release their contents continuously like plug ins, some release for a lesser time period like candles, and some release briefly like an aerosol spray. Although some air fresheners contain something to adsorb or convert malodorous substances, most also emit fragrances.

There's a lot of information on fragrances. Since fragrance ingredients are typically unregulated there are few reporting requirements, however, the chemical components can be a significant contributor to the VOCs. Terpenes are one of the most common chemical classes in fragrance products. These are found in essential oils of many plants and trees although many can be synthetically produced. Aldehydes, alcohols, ketones, and esters as well as other chemical classes can also be found in many fragrances.

In addition to the fragrance components, most air fresheners also contain some kind of solvent that is used as a carrier for the fragrance; these solvents often have specific characteristics of volatility or evaporation so that the fragrance is distributed uniformly. Some common solvents include mineral oil, glycols or glycol ethers, and ethanol. Some products also contain phthalates, formaldehyde, or petroleum-based chemical compounds. In addition, secondary reactions can generate chemical compounds that were not present in the product by itself. For example, terpenes and ozone can form formaldehyde, as well as many other compounds.

### **About Prism Analytical Technologies, Inc.**

Prism Analytical Technologies, Inc. is a leading consultative air testing laboratory in the United States that is devoted to the chemical identification and analysis of contaminants in the air. We are a recognized leader in the development and deployment of ambient air testing methodologies for Fortune 100 and 500 companies, industrial hygienists, and environmental consultants. Prism's science-based technologies and wide range of air testing support help clients solve indoor air quality, process control, industrial, and environmental challenges.