

That New Carpet Smell

We're all familiar with the smell of new carpet and although some people like the odor, there are a number of chemicals in carpet, carpet backing, and carpet adhesives that could cause problems. The primary VOC responsible for the new carpet smell is 4-phenylcyclohexene (4-PCH); it has a very low odor threshold of only 0.3 ppb. The 4-PCH, along with styrene and 4-vinylcyclohexene, is a byproduct of the styrene-butadiene (SB) backing used with many carpets. Another common VOC emitted from carpet is caprolactam, which is produced by nylon fibers. Caprolactam used to be on the EPA Hazardous Air Pollutants list but it was delisted in 1996.

In addition to these more unique chemical compounds, carpet/backing/adhesive can also emit a large number of other common VOCs including formaldehyde, acetaldehyde, benzene, toluene, trichloroethane, and many others. The combination of these chemicals often triggers respiratory irritation as well as headaches, skin rash, shortness of breath, fatigue, and other symptoms.

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.