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Fragranced consumer products and undisclosed ingredients

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Abstract

Fragranced consumer products—such as air fresheners, laundry supplies, personal care products, and cleaners—are widely used in homes, businesses, institutions, and public places. While prevalent, these products can contain chemicals that are not disclosed to the public through product labels or material safety data sheets (MSDSs). What are some of these chemicals and what limits their disclosure? This article investigates these questions, and brings new pieces of evidence to the science, health, and policy puzzle. Results from a regulatory analysis, coupled with a chemical analysis of six best-selling products (three air fresheners and three laundry supplies), provide several findings. First, no law in the U.S. requires disclosure of all chemical ingredients in consumer products or in fragrances. Second, in these six products, nearly 100 volatile organic compounds (VOCs) were identified, but none of the VOCs were listed on any product label, and

one was listed on one MSDS. Third, of these identified VOCs, ten are regulated as toxic or hazardous under [federal laws](#), with three (acetaldehyde, chloromethane, and 1,4-dioxane) classified as Hazardous [Air Pollutants](#) (HAPs). Results point to a need for improved understanding of product constituents and mechanisms between exposures and effects.

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Keywords

Fragrances; Consumer products; Fragranced consumer products; Chemicals; Toxicity; Laws; Air fresheners; Laundry supplies; Regulations

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