



SUSTAINABLE PURCHASING QUICK GUIDE: SAFER INSULATION AND SEALANTS

Ecology Center and Safer States' Sustainable Purchasing Quick Guides are a series of fact sheets highlighting sustainable purchasing options for high volume, high impact products. They are designed to help cities, counties, and states create safer communities through the purchase of more environmentally and socially conscious products.

Why Insulation and Sealants?

Insulation and sealants are critical to building safety and comfort. However, it's important to know that many of these materials often contain toxic chemicals that are harmful to building occupants. For instance, sealants can contain high levels of volatile organic compounds (VOCs) and arsenic-based fungicides. Insulation can contain formaldehyde (a [carcinogen and asthmagen](#)) and toxic flame retardant chemicals. Some spray foam insulation can contain toxic chemicals, like isocyanates, that are asthmagens and have been identified as a leading cause of work-related asthma. Plasticizers called phthalates are common in polymer and polyurethane sealants. Many phthalates are known endocrine disruptors and have been found to damage reproductive systems and interfere with fetal development. They have also been associated with asthma. Luckily, healthier and more sustainable options are available!

Solutions: Municipalities Taking Action

New York City created the [Minimum Standards for Construction Products](#), a set of specifications for building construction and facility maintenance, which identifies minimum standards for VOCs in sealants. The [Design Requirements and Guidelines](#) developed by Massachusetts' Bureau of Housing Development and Construction provides requirements for a range of building materials, including low or no VOC sealants.

Benefits

Purchasing insulation and sealant materials that are more sustainable and contain fewer toxic chemicals benefits the environment and protects human health by reducing the presence of persistent chemicals that can make their way into the environment and reducing exposure of building occupants to harmful chemicals.

Tools and Resources

- Ecology Center Directory of Sustainable Purchasing: [Sealants and Adhesives](#) and [Insulation](#); Directory of resources for safer and sustainable products
- HomeFree's Product Guidance for [Sealants](#) and [Insulation](#); Guidance and ranking for safer product purchasing
- [Enterprise Green Communities Criteria: Materials](#); Criteria for purchasing healthy and sustainable materials