



THE TRUTH ABOUT TRADITIONAL SPRAY FOAM

TRADITIONAL SPRAY FOAM—KNOW THE FACTS

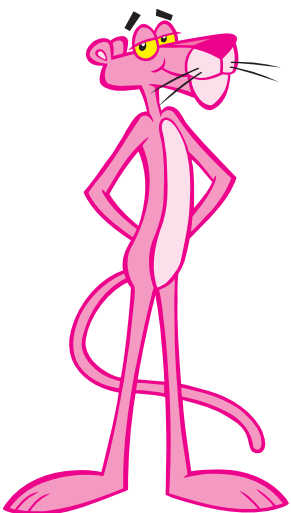
Despite its safety and productivity issues, traditional spray foam (spray polyurethane foam) has been recognized for its performance. And without a safe-to-install alternative to provide the same energy efficiency performance, building professionals have been forced to use lower performing air sealing alternatives such as caulk or accept the risks of traditional spray foam.

That's why Owens Corning used its building science expertise to find a solution and create a safe-to-install system that provides a high level of energy efficiency as an alternative to traditional spray foam.

So what are the safety facts about traditional spray foam? Take a look at these eye-opening highlights from an MSDS (a worker safety document required of manufacturers) from a leading manufacturer. The full documents are also attached.

Health hazards (Demilec MSDS Side A, Section 6)

- **Inhalation (acute):** "Isocyanate vapor/mist at concentration above the exposure limits can irritate (burning sensation) the mucous membranes in the respiratory tract, causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function... Exposure well above the TLV may lead to bronchitis, bronchial spasm and pulmonary edema. Effects are usually reversible. Chemical or hypersensitive pneumonitis, with flu-like symptoms has also been reported. These symptoms can be delayed up to several hours after exposure."
- **Effects of chronic exposure:** "Prolonged contact may cause reddening, swelling, rash, scaling, blistering, and in some cases, skin sensitization, as a result of previous repeated overexposure or a single large dose. Certain individuals develop sensitization which will cause them to react to a later exposure to product at levels well below the TLV. Symptoms including chest tightness, wheezing, cough, shortness of breath or asthma attack, could be immediate or delayed. There are reports that once sensitized, an individual can experience these symptoms upon exposure to dust, cold air or other irritants."



Personal protection (Demilec MSDS Side A, Section 8)

- **Ventilation requirements:** "...Be sure to establish a safety zone to keep out nonessential personnel... Use full-face air-supplied respirator, chemical resistant gloves, eye protection and Saranex or polyethylene coated Tyvek coveralls. Take care that others do not enter the area until residual MDI and amine vapor have been vented away."
- **Additional protective measures:** "Safety showers and eye wash stations should be easily accessible to the work area."

Environmental and Disposal Information (Icynene MSDS Component A, Section 6)

- **Accidental Release Measures:** "Avoid any contact. Barricade area. Clear non-emergency personnel from area. Keep upwind of spill. The area must be evacuated and reentered by persons equipped for decontamination. Use appropriate safety equipment."

Waste disposal (Demilec MSDS Side A, Section 11)

- "...Do not heat or cut empty containers with electric or gas torch, vapors and gas may be toxic."

Traditional spray foam in the news

"The explosion partially leveled the home. He says the workers were spraying insulation foam. He believes that preliminary investigation shows the cause to be a combustion of fumes and heating fuel, ignited by a space heater."

—KKTV News, Nov. 25, 2008

"The fire was caused by spontaneous combustion to a piece of wood joist where fire-retardant spray foam insulation had not completely cured. The wood joist was smoldering, causing smoke to escape the structure."

—Telegraph Herald, Aug. 22, 2007