Foiling Fiberglass



Charlie did general labor for a home builder, and enjoyed his work. One day after installing rolls of insulation in the attic of a new home, he noticed that he had developed redness on his back. By the end of the week, he was red and itchy all over his body, and his eyes were irritated and swollen.

Charlie's boss hadn't told him he needed to wear protective clothing, and Charlie didn't know. He got small particles of fiberglass on his clothing and in his skin.

Fibrous glass, or fiberglass, refers to a group of products manufactured from glass. There are two types: continuous filament and glass wool. Continuous filament fiberglass is used in reinforced plastics, foams, and other materials in products including boats and automobile bodies. Glass wool is the principal material in the fiberglass insulation used in houses and buildings. If you work with any of these products you need to know the hazards they present.

You may remember "itching powder"– its main ingredient was fiberglass! So it's not surprising that the most common hazards are irritation of the skin, eyes, mucous membranes and the respiratory tract. Fibrous glass filaments lodge in your skin and other surfaces, including the mucous membranes of the nose, eyes and throat. Bigger pieces can cause cuts.

Workers who are exposed to small fibrous glass particles may inhale them. The particles accumulate in the lungs, causing damage similar to that caused by asbestos. Over time, workers can develop fibrosis and lung tumors, although fiberglass is not classified as causing cancer.

People who work with fiberglass need to protect themselves from exposure. Typical protection involves gloves, goggles, protective shoes and coveralls. Don't tape up the cuffs – it doesn't help and may trap particles in the coveralls with you. Respiratory protection should be used wherever inhalable particles are present. Engineering controls can also help reduce worker exposure. Showering with water and plenty of soap immediately after work may help prevent skin problems.

If you work with fiberglass in any form you need to be aware of the injuries that it can cause, and what personal protective equipment to use. By taking a few simple precautions you can avoid the health hazards of fiberglass.