

Avoid Purchasing a Spa Insulated with Spray Polyurethane Foam

Warning: A few U.S. custom spa manufacturers are still using spray polyurethane foam to insulate their bathtubs and indoor spas. Before choosing your custom spa manufacturer, for your own health and safety, **verify that the spa manufacturer does not insulate the shell with spray polyurethane foam.**

Origin: Polyurethane foam was created during World War II using research from the renowned German chemist Otto Bayer. It was used extensively to insulate airplanes for the military before eventually making its way into the commercial sector.

Why avoid Spas insulated with spray polyurethane foam?

For a detailed study, please visit this government website:

http://www.epa.gov/dfepubs/projects/spf/spray_polyurethane_foam.html

----- The following is an excerpt from the content found on the EPA's website -----

Health Concerns

Spray polyurethane foam (SPF) is a highly-effective and widely used insulation and air sealant material. However, exposure to its key ingredient, isocyanates, and other SPF chemicals in vapors, aerosols, and dust **during and after installation** can cause **asthma**, sensitization, **lung damage**, other respiratory and breathing problems, and skin and eye irritation.

Individuals with a history of skin conditions, respiratory allergies, asthma, or prior isocyanate sensitization should carefully review product information when considering the use of SPF products and may want to **consider safer alternatives**. Manufacturers recommend in their isocyanate safety data sheets that individuals undergo medical surveillance prior to working with these materials and individuals with a history of medical conditions as described above will be restricted from work with isocyanates.

Potential Off-Gassing

The potential for off-gassing of volatile chemicals from spray polyurethane foam is not fully understood and is an area where more research is needed. (Off-gassing may continue for many months after initial application.)

Should I Take Action or Remove SPF That Has Been Installed?

If home or building occupants have concerns that they may be exposed to residual SPF chemicals, potential off-gassing, or continue to smell odors, consider the following:

Work with the contractor to identify the problem or consider hiring an independent expert such as a qualified Indoor Air Quality (IAQ) consultant to diagnose sources of indoor air issues.

If you experience breathing problems or other adverse health effects, seek immediate medical attention.

Contact the contractor and/or product manufacturer to request help in solving the problem if the SPF material is shown to be the source of the problem.

If concerns are not resolved with the contractor and/or product manufacturer, affected parties should contact their local or state consumer protection office or contractors' licensing board.

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So why do some spa manufacturers continue to use this dangerous process?

Bottom line; it is a cheap way to insulate and, although highly toxic, is extremely easy to apply. Of course once it is applied to the spa shell and equipment, it is impossible to remove. In addition, it becomes virtually impossible to repair many of the spa components since they become embedded in the hardened foam.

How does DaVinci Spas insulate their products?

We utilize a 21st Century, flexible, reflective sheet barrier, that is a vastly more effective thermal barrier than polyurethane foam. In fact, our insulating material has 15 times the insulating potential of spray-on polyurethane foam! Though the material itself is more costly, and slightly more difficult to install, it is also completely removable from the spa in the rare occurrence when the spa may need servicing.