

Guidance for Videos or Images Showing Spray Polyurethane Foam (SPF) Application

ISSUE AX425 • May 2011

Purpose

This guidance is intended to support the development of visual media content (e.g. videos, photos, animations, and graphic or artistic illustrations) showing the installation of spray polyurethane foam (SPF) or polyurethane-based insulating foam sealants. Such videos or images are often used for guidance or training, as marketing or advertising materials, or for other purposes.

This document also helps producers or media outlets who are evaluating SPF visual media content for airing or posting.

Introduction

Particularly in the home construction arena, video showing construction in progress has long been recognized as a highly effective way to illustrate how to install a product, and also to showcase good practices and safety procedures. Instructional and marketing videos are now available in more venues than ever, with retailers or manufacturers offering video on compact disc, as well as via the internet.

Because the process of applying SPF can be visually striking, visual media content can be very effective in both attracting interest and providing education.



Center for the
Polyurethanes Industry

Scope of Guidance - Kinds of Spray Polyurethane Foam (SPF) and Insulating Foam Sealant

Making spray polyurethane foam (SPF) involves mixing and reacting chemicals on site to create the foam insulation product. It is important to understand that the handling of these chemicals requires certain protective measures. This guidance applies to two types of SPF and an insulating foam sealant.

There are two major categories of spray polyurethane foam (SPF): two-component high-pressure SPF and two-component low-pressure SPF.

There are two major categories of spray polyurethane foam (SPF). The first kind is called two-component high-pressure SPF. This highly effective insulation, often used as a whole-house insulation over large surfaces, calls for sophisticated personal protective equipment (PPE) during application. This product is applied by trained workers. If the visual media content depicts chemicals in large drums that will be mixed to make foam, it will be a two-component high-pressure type of foam.

Large drums (typically 55 gallon) containing SPF chemicals used for two-component high-pressure SPF systems



The second kind of SPF is called two-component low-pressure SPF. This product is often used to fill in large cracks and crevices, and it is also used with special PPE. This second kind of product is primarily used by professionals doing home weatherization and other trained workers. If the visual media content depicts chemicals in a kit or box containing two cylinders or what look like small propane tanks, it will be a two-component low-pressure type of foam.

Below is an example of a typical two-component low-pressure kit and low-pressure refillable cylinders.



A third kind of product, available to fill smaller cracks and crevices, is typically described as insulating foam sealant. Also a polyurethane product, it is available in home improvement stores in cans. This product is appropriate for do-it-yourself (DIY) use by following the use instructions on the can and using the necessary PPE, generally gloves, goggles and appropriate clothing.

Insulating foam sealant (typically 12-24 oz. cans)



Guidance

1. Determine the type of insulation or sealant product which is being depicted in the video/script

This will help the reviewer determine whether the visual media content is showing the ventilation practices, PPE, disposal practices, and other requirements or practices appropriate to the specific product.

If you aren't a manufacturer of SPF or a professional SPF contractor, it's a good idea to obtain a specialized consultant to help you plan your visual media content and to assist with production. Your consultant can help you with the items discussed in this guidance, including U.S. Occupational Safety and Health Administration (OSHA) compliance. If you're a producer, consider contacting the product manufacturer directly for assistance – that's a great technical resource.

2. Use the product in accordance with the Material Safety Data Sheet (MSDS)

OSHA requires chemical manufacturers and importers to obtain or develop an MSDS for each hazardous chemical they produce or import and provide them with the chemicals to their customers. Employers are required by OSHA to have an MSDS in the workplace for each hazardous chemical which they use. Typically, an MSDS accompanies a chemical product when delivered or purchased.

The MSDS contains lots of important information from the product manufacturer, including first aid instructions, disposal information, and PPE recommendations. All instructions on the MSDS must be followed during videotaping and photography sessions. This is both to create videos/images depicting the proper use of the product AND to protect the people developing the visual media content, including the production crew and those being taped or photographed.

If you do not receive an MSDS when receiving a chemical product, contact the supplier or manufacturer. For more information, refer to: [Have You Read the MSDS?](#), found on the American Chemistry Council Center for the Polyurethanes Industry website: www.spraypolyurethane.org.

3. Comply with OSHA requirements for installation

Video/images of SPF being applied must comply with OSHA regulations. This is for two reasons: first, to protect the health and safety of the production crew and workers featured in the video. An advance evaluation should be made whether the production crew will be in close enough proximity to the application to require PPE. Note that PPE, including respirators, may need to continue to be worn for a period of time after completing the spraying of two-component SPF until the levels of regulated chemicals drop below occupational exposure levels. Consult your SPF specialist for instructions on when persons can reenter the site without PPE.

The second reason is that responsible producers will want to create quality videos and images that demonstrate installation of SPF in a manner that is compliant with all applicable laws.

4. Use PPE appropriate to the type of insulation or sealant product

Follow the MSDS instructions regarding the PPE to be used for the applicable product. For two-component high-pressure SPF, industry guidance suggests the following PPE:

- **RESPIRATOR:** A National Institute of Occupational Safety and Health (NIOSH)-approved respirator appropriate for the anticipated workplace exposures. For two-component high-pressure SPF being used in interior applications, this is typically a supplied-air respirator (SAR).
- **EYE PROTECTION:** Eye protection can be provided by a full face-mask respirator design.
- **COVERALLS:** Disposable coveralls covering all exposed skin.
- **FOOTWEAR:** Protective footwear, such as work boots.
- **GLOVES:** Appropriate chemical-resistant gloves such as nitrile, neoprene, butyl rubber or PVC gloves.



Although Personal Protective Equipment (PPE) requirements will vary depending on the type of SPF product and nature of the application, here is an example of an SPF applicator wearing proper PPE for this interior two-component high-pressure SPF installation.

For two-component low-pressure SPF, industry guidance suggests the following PPE:

- **RESPIRATOR:** Conditions and potential exposures for some two-component low-pressure SPF applications may trigger OSHA requirements to use a respirator. Depending on the anticipated exposures, the respirator indicated may be a supplied-air respirator (SAR) or an air purifying respirator (APR) or powered air-purifying respirator (PAPR) with organic vapor cartridges and particulate pre-filters.
- **EYE PROTECTION:** Goggles or safety glasses with side shields.
- **COVERALLS:** Disposable coveralls covering all exposed skin.
- **FOOTWEAR:** Protective footwear, such as work boots.
- **GLOVES:** Appropriate chemical-resistant gloves such as nitrile, neoprene, butyl rubber or PVC gloves.

For insulating foam sealant, follow the manufacturer's instructions on the can regarding skin protection (e.g., long sleeves, gloves), eye protection (e.g., protective glasses or goggles), and ventilation. For more information on PPE for SPF and insulating foam sealant applications, refer to the American Chemistry Council Center for the Polyurethanes Industry website: www.spraypolyurethane.org.

5. Illustrate good housekeeping practices

Appearances speak loudly, so job site housekeeping is important. A well-produced video or image, for example, will show floors and spray equipment to be free from debris and excessive overspray. Look for potential safety hazards, such as those due to placement of power cords, ladders or furniture. Remove items that might be mistaken for food or beverage containers or personal effects in the background. You may want to consider re-shooting or editing to remove these items.

6. Illustrate engineering controls

“Engineering controls” is a term used to describe measures at a job site that reduce or prevent exposure to hazards (including chemical hazards) to workers. SPF is installed using appropriate engineering controls, which can include containment and ventilation techniques (e.g., plastic sheeting, fans, open windows and doors).



7. Consider FTC requirements for marketing claims

Insulation products are said to have green attributes, because insulation improves the energy efficiency of a building, saving energy to heat and cool the building. Products can have other green attributes, such as whether a product is partially or entirely made of renewable (generally plant-derived) content. Some foam products are partially formulated with renewable or recycled content.

SPF manufacturers may wish to market or advertise the green attributes of their products, and this can be done within the boundaries of requirements set out by the Federal Trade Commission (FTC), which prohibit deceptive or misleading marketing. When producing visual media content about a foam product, you may find it helpful to understand the FTC's requirements. The FTC's Guides for the Use of Environmental Marketing Claims, commonly known as the Green Guides is available to help marketers avoid making environmental claims that are considered unfair or deceptive under Section 5 of the FTC Act.

You may also refer to the "Green" Marketing Claims and Spray Polyurethane Foam Guidance at www.spraypolyurethane.org.

8. Consider fire safety during taping

Fire safety is an important consideration when installing SPF. There are building code requirements that apply to SPF, so SPF should be depicted in visual media content in compliance with applicable codes. If the application being illustrated in a video or image is subject to code requirements for ignition or thermal barriers, consider including a reference to the code requirement in the narrative track (voice over) for the video. If the video includes footage of the finished project, include an illustration of a properly installed thermal barrier.

SPF Health and Safety Training

The Center for the Polyurethanes Industry (CPI) of the American Chemistry Council (ACC) offers a free online training program to help educate spray polyurethane foam (SPF) users on good safety practices.

The training, which is available at www.spraypolyurethane.org, takes about 1.5- 2 hours to complete. At the end of the training, users successfully passing a test on the training material receive a "Recognition of Completion" form and wallet-sized card, which are valid for two years.

The SPF Chemical Health and Safety Training is targeted to professionals in the building and construction industries. The training is comprised of 12 units, including information on SPF ingredients, safe use, handling, and disposal of SPF, and safety control measures including engineering controls, work practices, and personal protective equipment (PPE).

For More Information

Extensive guidance materials on SPF are available at www.spraypolyurethane.org.

This document may be updated. For the most current version of this document, see www.spraypolyurethane.org.

This document was prepared by the American Chemistry Council (ACC) Center for the Polyurethanes Industry (CPI). It is intended to provide general information to persons who may handle or apply spray polyurethane foam chemicals. It is not intended to serve as a substitute for in-depth training or specific handling or application requirements, nor is it designed or intended to define or create legal rights or obligations. It is not intended to be a "how-to" manual, nor is it a prescriptive guide. All persons involved in handling and applying spray polyurethane foam chemicals have an independent obligation to ascertain that their actions are in compliance with current federal, state and local laws and regulations and should consult with their employer concerning such matters. Any mention of specific products in this document is for illustration purposes only and is not intended as a recommendation or endorsement of such products.

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