



## DTSC Lists SPF Systems as Second Priority Product under Its SCP Program

DTSC, GREEN CHEMISTRY, PRODUCT STEWARDSHIP

By ROGER PEARSON, May 14, 2018

The Department of Toxic Substances Control has **listed spray polyurethane foam systems with unreacted methylene diphenyl diisocyanates<sup>1)</sup>** (SPF Systems) as a "Priority Product" pursuant to the department's Safer Consumer Products (SCP) program; effective as of July 1. Manufacturers of SPF systems selling in California will now have to identify themselves and ultimately will have to undertake an "alternatives analysis" (AA) to determine whether there are safer alternatives for the "chemicals of concern" contained in the systems that caused the listing.

DTSC defines SPF systems as systems containing liquid chemical mixtures in two separate containers that are distributed together. The two containers are commonly described as Side A and Side B. Side A contains unreacted methylene diisocyanates (MDI), while Side B contains a mixture of polyols and other ingredients, which can include catalysts, blowing agents, flame retardants, and surfactants. The contents of the two containers react when mixed together to form polyurethane foam that is used for insulation, roofing, or sealing and filling voids and gaps. The listing covers both high-pressure and low-pressure SPF systems.

DTSC selected SPF systems for regulation under the SCP program due to the potential for both workers and consumers to be exposed to the unreacted MDI. The Department cites studies showing that the use of SPF systems can expose users to unreacted MDI levels that can cause significant health effects including asthma, respiratory irritation, extrinsic allergic alveolitis or hypersensitivity pneumonitis, interstitial and peribronchiolar fibrosis, allergic sensitization, dermal sensitization, and allergic contact dermatitis. The listing identifies 4,4'-methylenediphenyl diisocyanate (CAS #101-68-8) and generic methylene diphenyl diisocyanate mixed isomers (CAS #26447-40-5) as the "chemicals of concern" justifying the designation.

Manufacturers of SPF systems who sell their products in California will initially be required to notify the Department by September 1. They will then be required to perform an alternatives analysis (AA) within 180 days after the proposed designation is final. DTSC estimates that there are 17 such manufacturers, 14 of which are headquartered outside of California. The Department estimates that the collective cost to these manufacturers to prepare Priority Product Notifications and Abridged AA Reports, as specified in the SCP regulations, would range from \$1,067,000 to \$3,107,600.

The Department proposed the listing of SPF systems as a Priority Product in March of last year [see **DTSC Formally Proposes to Designate Second Priority Product<sup>2)</sup>**, April 1, 2017]. The comment deadline was June 6 and a public hearing was held on May 16, of last year. The Department

**received 38 written comments**<sup>3)</sup> by the deadline, as well as additional comments at the public hearing. Despite the criticisms of the proposal contained in those comments, the Department made no substantive or non-substantive changes in the regulatory text. The final text contains the definition of an SPF system, identifies the two chemicals of concern noted, and lists the hazard traits and toxicological endpoints that caused the listing.

## Alternatives Rejected

In drafting the regulation DTSC considered three alternatives:

- The Department considering adding roofing materials and roof coatings containing toluene diisocyanate (TDI) to the definition of priority product. It rejected this alternative after SPF system manufacturers explained that TDI-containing coatings are a separate product serving a different function.
- The Department also considered adding one-component pre-mixed cans of SPF products. It decided again this because the unreacted MDI is mostly reacted within the can prior to use by the consumer.
- Finally, the Department rejected a proposal by industry representatives to replace the Priority Product listing with an industry-led stewardship program, because it determined that the proposal fails to advance the goals of the SCP Program to drive SPF systems manufacturers to find safer alternatives. The Department also notes that "voluntary initiatives are not enforceable."

## Response to Comments

The "final statement of reasons" **accompanying the final listing**<sup>4)</sup> includes over 50 pages of responses to comments by the Department. For the most part the Department notes that the comments concentrated on "various issues associated with making the Priority Product determination listing determination in the face of uncertainty or definitive causal data." Many of these comments, notes the Department, address the "precautionary principle."

The Department further notes that there were no suggested alternatives to the Priority Product listing, nor were there any proposed changes in the language of the listing regulation.

## Current Priority Products Status

As noted above this is the second Priority Product listing. The first—covering children's sleepwear containing flame retardants—became effective last July 1 [see **DTSC Designates First Priority Product: Children's Foam-Padded Sleeping Products**<sup>5)</sup>, June 29, 2017]. There have been no notices or AA reports indicating that any manufacturer of those products is prepared to keep marketing them in California.

A third Priority Product—Paint Strippers with Methylene Chloride—was proposed in November of last year. The comment period closed on January 18 and a public hearing was held on January 8. There were numerous commenters both pro and con on this proposed listing. It is still pending [see **Commenters Have Sharply Different Views of DTSC's Proposed Designation of Methylene Chloride Paint Strippers as a SCP Priority Product**<sup>6)</sup>, February 14, 2018].

## Resources for this article

**1. listed spray polyurethane foam systems with unreacted methylene diphenyl diisocyanates**

[http://www.dtsc.ca.gov/SCP/Effective\\_July\\_1\\_2018-Regs-Spray-Polyurethane-Foam.cfm](http://www.dtsc.ca.gov/SCP/Effective_July_1_2018-Regs-Spray-Polyurethane-Foam.cfm)

**2. DTSC Formally Proposes to Designate Second Priority Product**

<https://toxreports.com/articles/12804>

**3. received 38 written comments**

<https://calsafer.dtsc.ca.gov/cms/searchcomments/>

**4. accompanying the final listing**

<https://toxreports.com/documents/26726>

**5. DTSC Designates First Priority Product: Children's Foam-Padded Sleeping Products**

<https://toxreports.com/articles/13110>

**6. Commenters Have Sharply Different Views of DTSC's Proposed Designation of Methylene Chloride Paint Strippers as a SCP Priority Product**

<https://toxreports.com/articles/13338>