

Product Information Bulletin

Flame Retardant in Plasti-Fab EPS Products

This bulletin provides basic information regarding HBCD (hexabromocyclododecane) flame retardant use in Plasti-Fab EPS products. Additional information regarding HBCD can be found on the PFB Sustainability website at www.pfbsustainability.com/hbcd/hbcdv1.2.html.

Why use a Flame Retardant

All construction materials must adhere to fire safety requirements during their manufacture, transportation and storage. HBCD used in EPS insulation allows it to meet building code fire performance requirements for use as a component in building assemblies and permits safe handling and storage.

Regulatory Status

In Canada, a screening level risk assessment prepared by Environment Canada & Health Canada concluded HBCD is toxic to the environment, but does not pose a risk to human life or health. The EC/HC report¹ provides the following statements:

Based on the available information, it is concluded that HBCD is entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity.

Based on the adequacies of the margins between upper-bounding estimates of exposure to HBCD and critical effect levels, it is concluded that HBCD is not entering the environment in a quantity or concentration or under conditions that constitute or may constitute a danger in Canada to human life or health.

Canadian regulators published a Proposed Risk Management Measure for HBCD² in October 2012. Regulators are recommending the prohibition of HBCD from use in Canada to prevent release to the environment. Based upon recommendations from EH/HC, HBCD was added to Schedule 1 of the Canadian Environmental Protection Act, 1999 in November 2012.

Next Steps

The chemical industry has announced the development of an alternative flame retardant for use in EPS insulation. Commercial production of the new flame retardant is slowly coming online and initial quantities have been provided for testing purposes to ensure that Plasti-Fab EPS products will continue to adhere to product performance requirements including all building code fire performance requirements. Plasti-Fab will continue to work with industry partners as we transition to the new flame retardant.

PFB Corporation is committed to proactively working with regulatory bodies to ensure appropriate risk management protocols are adopted to ensure environmentally sound use of HBCD until alternatives can be identified and commercialized. By employing strict product stewardship practices, emissions can be virtually eliminated to prevent any potential impact on the environment.

¹ Screening Assessment Report on Hexabromocyclododecane, Chemical Abstracts Service Registry Number 3194-55-6, Environment Canada & Health Canada, November 2011.

² Proposed Risk Management Measure for Hexabromocyclododecane (HBCD), Chemical Abstracts Service Registry Number 3194-55-6, Environment Canada & Health Canada, October 2012.