

May 20, 2016

### **XPSA Statement on Styrene Prop 65 Listing**

On April 22, 2016, the California Office of Environmental Health Hazard Assessment (OEHHA) added styrene to its Proposition 65 list. OEHHA made this decision based on styrene's listing in the U.S. National Toxicology Program's (NTP) 12th Report on Carcinogens in 2011.

Extruded polystyrene (XPS) foam insulation is manufactured of polystyrene. There are many differences between styrene and polystyrene. Styrene is a liquid used as a building block to manufacture materials, such as polystyrene. Polystyrene is a type of plastic made by joining together many styrene monomer units, and is used as both a solid and a foam material. Polystyrene is used to make a variety of consumer products, including extruded polystyrene foam insulation.

OEHHA made it clear that one styrene-based plastics product that will not need a label under the Proposition 65 ruling is polystyrene. "We clearly stated this does not cover polystyrene," said Sam Delson, deputy director for external and legislative affairs in the state's OEHHA.

OEHHA proposed a no significant risk level (NSRL) of 27 micrograms per day for styrene. A NSRL is defined as the level of exposure that would result in not more than one excess case of cancer in 100,000 individuals exposed to the substance over a 70-year lifetime. In other words, a person exposed to the substance at the "no significant risk level" for 70 years would not have more than an additional one in 100,000 chance of developing cancer as a result of that exposure (the expected incident rate of all cancers in the American population is approximately 25-36% over a 70-year lifetime). Based on the prevailing scientific research and data available, styrene exposure from polystyrene products is below the NSRL.<sup>1</sup> As a result, polystyrene is safe for use in a variety of applications including extruded polystyrene foam insulation. Potential residual levels of styrene are being evaluated by manufacturers to be sure exposures do not exceed "safe levels" without appropriate notification.

---

<sup>1</sup> Since styrene is only minimally absorbed by the skin after dermal contact (California Public Health Guidance doc., p. 9), the most likely route of exposure to styrene from non-occupational use of polystyrene is from food contact products. Exposure to styrene from polystyrene food contact products is estimated at 6.6 micrograms per day ( $\mu\text{g}/\text{d}$ ) based on styrene migration data (American Chemistry Council, "Food and Drug administration: Safety of Polystyrene Foodservice Packaging, 2016, available at: <https://plasticfoodservicefacts.com/main/Safety/Safety-of-PS-Foodservice-Products>). Thus the estimated exposure from polystyrene consumer products having the most likely route of human exposure is well below the NSRL of 27  $\mu\text{g}/\text{d}$ .