

June, 2006

Polystyrene Packaging Council
Statement on Safety and Health Aspects
of Lemon Tea and Polystyrene Foam Foodservice Containers

Polystyrene is perfectly safe for use in packaging and containing hot liquids, including lemon tea. The U.S. Food and Drug Administration (FDA) regulates the safety of food-contact packaging, and FDA regulations allow the use of polystyrene as a food-contact packaging material. The fact is that plastics, including polystyrene, have been used safely for decades in food contact applications with no validated scientific evidence that they pose any human health concerns. The FDA, the National Academy of Sciences, and other reputable federal authorities rely on the weight of validated scientific evidence. The weight of scientific evidence overwhelmingly supports the safe use of plastics in food contact applications.

It has been known for some time that citrus oils, such as lemon oil, when used under certain conditions with foam cups, may cause a pitting of the cup's sidewall. The oil comes from the lemon rind only and only when the rind is immersed in a hot liquid, such as tea. Many studies of this phenomenon have been conducted all of which have indicated that no actual styrene is released into the beverage under these conditions. The FDA has examined this matter carefully and has concluded that it presents no harm to human health (FDA 8-3-77). In addition, the material used to make polystyrene foam cups is in strict compliance with FDA's regulations for food packaging materials.

More recently, an independent study (*referenced below*) by the Harvard Center for Risk Analysis reported that styrene is naturally present in foods such as strawberries, beef and spices, and is naturally produced in the processing of foods such as wine and cheese. The study also reviewed all the published data on the quantity of styrene contributing to the diet due to migration of food packaging and disposable food contact articles, and concluded there is not cause for concern for the general public from exposure to styrene from foods or styrenic materials used in food-contact applications, such as polystyrene packaging and foodservice containers. Also, the FDA has approved styrene as a food additive for flavoring.

More information on current, validated styrene health effects research and regulation is available by visiting the website of the Styrene Information and Research Center (SIRC) at <http://www.styrene.org>

More detailed information of polystyrene foodservice products and all styrenics products can be found at <http://www.polystyrene.org>; and <http://www.styreneforum.org>

"A Comprehensive Evaluation of the Potential Health Risks Associated with Occupational and Environmental Exposure to Styrene", Harvard Center for Risk Analysis, Harvard School of Public Health, Boston, MA (*Journal of Toxicology and Environmental Health*, Vol. 5, No. 1-2, January – June 2002, published quarterly by Taylor & Francis.

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