



The Sapphire Group™

Sapphire News

The Sapphire Group Demonstrates OCEs are Safe for Intended Purposes in Drinking Water

One of the most difficult things that society, scientists and regulatory agencies are confronted with is the estimation of how safe are chemical products in the marketplace when there are little or no relevant toxicity findings on that specific product. In particular, series of compounds in commerce today, polyurethanes made up in part of OCEs, important in the delivery of drinking water. These products include O rings and liners for storage tanks. The concern is over the chemicals that may leach at very low concentrations from these products even though the surface area has actually a relatively small percent of the contact with the water.

The task for the industry for continued product approval for these polyurethanes was to estimate the safe levels of these OCEs by using surrogate compounds which have large amounts of data. Critical to this process was to demonstrate the confidence in these extrapolations for safe levels. The Sapphire Group designed a study in which they began with the evaluation of candidates to choose the appropriate surrogate compound on which they would be able to confidently extrapolate the data. The criteria was developed by the team to select the right surrogate. Once the appropriate surrogate was selected, the team established what would be considered safe levels of the surrogate compound then extrapolated the findings to identify the safe levels of OCEs.

The team of experts at The Sapphire Group was able to demonstrate to the National Sanitation Foundation, the governing regulatory body, that OCEs are safe for their intended purposes. A significant outcome of this study is this process can be used to determine safety levels regarding a number of other products in the marketplace where little or no toxicity data is available.