

Overview

Epoxy resin systems are used widely in construction as part of protective coatings for steel structures such as bridges, storage tanks and wind turbines. Occupational exposures to epoxy resins have been associated with allergic and irritant dermatitis, occupational asthma, hypersensitivity pneumonitis (epoxy-resin lung) and acute decline in lung function. Seventy- ve to 95% of these coatings contain bisphenol A diglycidyl ether (BADGE), and this research team has documented high inhalation and skin exposures to BADGE among workers using these products. As part of their continued examination of exposure to epoxy resins, the researchers collected urine samples from 44 painters applying mid- and top-coats to steel structures. This study's goal was to determine urinary concentrations of BADGE biomarkers