

PROPOSITION 65-RELATED SERVICES THROUGHOUT THE SUPPLY CHAIN

ToxServices is a leading provider of Proposition 65-related services throughout a product’s lifecycle:

- **Pre-production screening:** Screening supplier disclosures (e.g., bill of materials, SDS, technical datasheets) to identify Proposition 65 chemicals and assess need for chemical analysis to quantify Proposition 65 chemical(s) in a product
- **Safe harbor assessment:** Conducting safe harbor assessments for product or product lines to quantify Proposition 65 chemical exposure among target populations and assess the need for Proposition 65 warnings
- **NSRL/MADL derivation:** Derivation of Proposition 65 safe harbor numbers (No Significant Risk Levels (NRSLs) for carcinogens and Maximum Allowable Dose Levels (MADLs) for reproductive/developmental toxicants)
- **Exposure assessment:** Conducting route-specific exposure assessments tailored to specific product type and applications:
 - Dietary exposure assessments
 - Multi-route exposure assessments (inhalation, dermal, indirect oral)
- **Identifying source(s) of Prop 65 chemical(s):** Performing root cause analyses to identify likely source of a Proposition 65 chemical in a product or formulation.



Over the years, ToxServices has performed hundreds of safe harbor exposure assessments for a broad variety of product types across industries. Our experienced scientists include numerous board-certified toxicologists, who leverage accepted test methodologies and state of the science risk assessment and exposure modeling approaches to creatively and transparently address each client’s unique needs.

ToxServices Proposition 65 Case Studies

Industry	Proposition 65 Chemical and Product Type	Approach and Outcome
Construction	Styrene in carpeting	Using headspace GC/MS results and ConsExpo modeling software, ToxServices calculated styrene exposure concentrations and estimated cancer risks for consumers and office workers across all life-stages and for carpet installers. A Proposition 65 warning label was not warranted in this case for any target population.

Industry	Proposition 65 Chemical and Product Type	Approach and Outcome
Construction	Formaldehyde in residential insulation	ToxServices performed nonlinear regression on emission rate curves to calculate time-weighted average formaldehyde air concentrations for indoor and outdoor product installation scenarios and demonstrated no significant increase in lifetime cancer risk for either workers or residents.
Cosmetics/Personal Care Products	Titanium dioxide in a cosmetic product	Litigation support work performed in response to a Notice of Violation. ToxServices developed a NSRL, designed an exposure simulation study, and performed a quantitative exposure assessment to demonstrate safe harbor.
Health Care	Cadmium, lead, and arsenic in a face mask	ToxServices leveraged detailed material morphology results (scanning electron microscopy), heavy metal testing results, and material manufacturing information to quantify exposure to substances of concern. A Proposition 65 warning label was not warranted for this product.
Food	Acrylamide	ToxServices assessed acrylamide exposure for specific food groups leveraging NHANES consumption data.
Apparel	Formaldehyde in permanent-press fabrics	The results of ToxServices' exposure assessment demonstrated that legal action against a clothing manufacturer was not warranted.
Professional/Industrial	Glycol ethers in printer ink	ToxServices used the U.S. EPA's emissions scenario models to calculate inhalation exposure to two glycol ethers identified on a material specification. The manufacturer reduced the levels of the glycol ethers in the ink in order to comply with Proposition 65.
Electronics (Consumer and Professional Use)	Antimony, arsenic, bisphenol A, cobalt, lead, naphthalene, nickel, phthalates, styrene, toluene	ToxServices has established NSRLs/MADLs for multiple substances that are found in electronics, such as nickel, antimony, and cobalt. Safe harbor exposure assessments of household and kitchen appliances, wearable electronics, occupational use electronics, and personal care devices confirm that Proposition 65 warning labels are not warranted for the majority of evaluated products when considering consumer and worker exposure scenarios.
Food Contact Items	Bisphenol A, benzene, lead, nickel, styrene	Integrated, multi-route exposure assessments leveraging U.S. EPA risk assessment and U.S. FDA food contact material methodologies confirmed that Proposition 65 warning labels are not warranted.
Consumer Recreational Products	Lead, phthalates, styrene	In response to Notices of Violation, ToxServices successfully demonstrated safe harbor from Proposition 65 label warning requirements for multiple manufacturers.

Contact Us! Contact ToxServices at info@toxservices.com or +1 202-429-8787.