

PRESS RELEASE



UNILEVER RECALLS 19 DRY SHAMPOO PRODUCTS FOR THE POTENTIAL PRESENCE OF BENZENE

On October 18, 2022, Unilever voluntarily recalled 19 dry shampoo aerosol products, including certain Dove, Nexxus, Suave, TIGI, and TRESemmé dry shampoos, due to the potential presence of benzene (ABC News[MD1] ; CNN[MD2] ; FDA 2022[MD3]). The affected products were produced prior to October 2021 and were distributed at various retailers nationwide.

Last year, Procter & Gamble (P&G) recalled more than 30 aerosol spray haircare products, including dry shampoos and dry conditioners, and more than a dozen aerosol antiperspirant sprays warning that the products could contain benzene.

The International Agency for Research on Cancer (IARC) classifies benzene as “carcinogenic to humans” based on evidence that exposure of adequate frequency, intensity, and duration may be attributed to the development of acute myeloid leukemia (IARC, 2018). The magnitude of risk to consumers from using dry shampoos that are potentially contaminated with trace levels of benzene is based on the absorbed dose and duration of exposure. It is important to note that the general population is exposed to benzene through everyday activities, including exposure to tobacco smoke, pumping gas at the gas station, motor vehicle exhaust, and industrial emissions (ATSDR, 2015[MD4]).

Industry Leading Experts

Paustenbach and Associates is a scientific consulting firm, specializing in exposure science, toxicology, industrial hygiene, epidemiology, radionuclides, and the application of regulatory and scientific approaches to quantitatively characterize the hazards posed by chemicals.

Our specialty is in providing data-driven solutions to solve the most complex problems facing our clients.

40+ years of Experience

Our staff has over 40 years of experience in the areas of risk assessment, environmental engineering, ecotoxicology, and occupational health.

90% Repeat Business

In surveys we have conducted of our clients, they always comment on the speed of our responsiveness and the quality of the end product.

According to the Food and Drug Administration (FDA), an independent health hazard evaluation revealed that daily exposure to benzene in the recalled products at the levels detected in testing would not be expected to cause adverse health consequences. Unilever decided to recall the dry shampoo products out of an abundance of caution (FDA 2022[MD1]).

How Paustenbach & Associates Can Help

Personal injury litigation surrounding trace contamination of benzene in various consumer products have increased in recent years. Scientists at Paustenbach & Associates have over 40 years of experience in conducting risk assessments of benzene in the workplace, ambient environment, point source emissions, and consumer products and foods in dozens of litigation cases. In these cases, we applied exposure science and the health risk assessment methodology embraced by the National Academy of Science to characterize the possible risks. We understand how to evaluate the potential health risk of benzene in dry shampoos.

Our scientists at Paustenbach & Associates have published many articles and book chapters on exposures to airborne benzene in various settings (Gross and Paustenbach, 2018; Haws et al., 2008; Hollins et al., 2013; Novick et al., 2013; Sahmel et al., 2013; Williams et al., 2005; Williams et al., 2008), as well as, on occupational exposures to vinyl chloride in hairspray products (Sahmel et al., 2009). Please contact Melinda Donnell at mdonnell@paustenbachandassociates.com for more information regarding our capabilities. [MD1]Link to: <https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/unilever-issues-voluntary-us-recall-select-dry-shampoos-due-potential-presence-benzene>

References

- Gross, S.A. and D.J. Paustenbach. 2018. Shanghai Health Study (2001-2009): What was learned about benzene health effects? *Crit Rev Toxicol.* 48(3):217-251.
- Haws, L.C., J.A. Tachovsky, E.S. Williams, L.L.F. Scott, D.J. Paustenbach, and M.A. Harris. 2008. Assessment of potential human health risks posed by benzene in beverages. *J Food Sci.* 73(4):T33-41.
- Hollins, D.M., B.D. Kerger, K.M. Unice, J.S. Knutsen, A.K. Madl, J.E. Sahmel, and D.J. Paustenbach. 2013. Airborne benzene exposures from cleaning metal surfaces with small volumes of petroleum solvents. *Int J Hyg Env Health* 216(3):324-332.
- IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. 2018. Benzene. International Agency for Research on Cancer.
- Novick, R.M., J.J. Keenan, S.A. Gross, and D.J. Paustenbach. 2013. An analysis of historical exposures of pressmen to airborne benzene (1938-2006). *Ann Occup Hyg.* 57(6):705-716.
- Sahmel, J., K.M. Unice, P.K. Scott, D. Cowan, and D.J. Paustenbach. 2009. The use of multizone models to estimate an airborne chemical contaminant generation and decay profile: Occupational exposures of hairdressers to vinyl chloride in hairspray during the 1960s and 1970s. *Risk Anal.* 29(12):1699-1725.
- Sahmel, J., K. Devlin, A. Burns, T. Ferracini, M. Ground, and D. Paustenbach. 2013. An analysis of workplace exposures to benzene over four decades at a petrochemical processing and manufacturing facility (1962-1999). *J Tox Env Health A.* 76(12):723- 746.
- Williams, P.R.D and D.J. Paustenbach. 2005. Characterizing historical industrial hygiene data: a case study involving benzene exposures at a chemical manufacturing facility (1976-1987). *J Occ Environ Hyg.* 2(7):341-50.
- Williams, P.R.D., J.M Panko, K. Unice, J.L. Brown, and D.J. Paustenbach. 2008. Occupational exposures associated with petroleum-derived products containing trace levels of benzene. *J Occup Environ Hyg.* 5(9):565-574.