

The parts washer is the perfect machine to "maximize" the inhalation of the parts washer solvent. Most contain benzene.

<http://www.toxic torts.com/safety-kleen-defective.shtml>

[http://www.exponent.com/petroleum\\_hydrocarbons/](http://www.exponent.com/petroleum_hydrocarbons/)

Aromatic Hydrocarbons are identified as chemicals of interest for health risk assessments at most petroleum-contaminated sites and for sites affected by petroleum solvent. Benzene is the only aromatic hydrocarbon classified by the U.S. Environmental Protection Agency and other health and environmental agencies as a "known human carcinogen," and therefore, is the primary focus of many petroleum hydrocarbon risk assessments. Exponent has conducted hundreds of site risk assessments where benzene was a chemical of concern. The potential exposure to benzene at a petroleum-contaminated site depends on the concentrations of benzene in the soil, water, and air, and the frequency and duration of expected human contact with the contaminated media. If the petroleum release was gasoline from an underground tank, benzene will likely be found in soils and possibly also in shallow groundwater and air. The volatilization of benzene in subsurface soils and shallow groundwater and its migration into buildings (vapor intrusion), have recently become a risk assessment focus that has led to the reopening of Records of Decision (RODs) at a number of sites. Benzene and the other aromatic hydrocarbons are taken up through the skin, lung, and digestive system, so all three routes of exposure (dermal uptake, inhalation, and incidental ingestion) need to be considered in assessing health risks.

Assessing the health risks associated with the use of petroleum solvents requires additional consideration beyond those of a site risk assessment. Benzene is not added to petroleum solvents but was historically found in solvents, at relatively low levels, occurring as a contaminant in the distillate fraction that composes the majority of the solvent. Little is known about the benzene concentrations in many of these solvents, except that levels were less than 0.1 weight percent (1000 ppm by weight), which is the OSHA reporting limit for material safety data sheets (MSDSs). Therefore, the initial challenge in assessing benzene exposures from solvents is characterizing the benzene content of the solvent, knowing that solvent composition has changed over time to meet the requirements of federal and state air quality regulations. Exponent has collected a substantial amount of data on benzene concentrations in various distillate fractions (e.g., mineral spirits, petroleum naphthas), including other aromatic hydrocarbons such as toluene, to assist clients in characterizing their historical products. Exponent has also conducted laboratory studies to assess the effects of petroleum solvent composition and benzene concentration on benzene volatilization from the liquid solvent, and simulation studies to directly measure airborne benzene concentrations associated with the use of specific solvents. Much of the focus on petroleum solvents has been on the reconstruction of potential exposures of

workers using historical formulations of petroleum solvents. Exponent has conducted exposure reconstructions for workers who used a variety of petroleum solvents, including parts-washing solvents, printing solvents, and penetrating oils.

<http://www.epa.state.il.us/small-business/parts-washer-wastes/>

Nonhazardous spent aqueous cleaning solutions can be discharged to the city sewer if they meet local discharge limits or with permission from the local publicly owned treatment works (POTW). The POTW may require you to treat your cleaning solution before discharging to the sewer. Contact your local POTW to find out their requirements. The discharge of cleaning solutions to the sanitary sewer also requires a permit from Illinois EPA. Spent parts washer cleaners, both solvents and aqueous cleaners, should never be discharged to a septic system or storm water sewer. For more information on permits and other water regulations that apply to your business, contact the Office of Small Business.

<http://www.safety-kleen.com/msds/820012Brev10-12-07.pdf>

This product contains ethyl benzene which can cause cancer. Risk of cancer depends on duration and level of exposure.