



Toxic Substances Portal

Benzene

CAS ID#: 71-43-2

Affected Organ Systems: Cancer, Gastrointestinal (Stomach and Intestines, part of the digestive system), Hematological (Blood Forming), Immunological (Immune System), Neurological (Nervous System)

Cancer Classification: Please contact [NTP](#), [IARC](#), or [EPA](#) with questions on cancer and cancer classification.

Chemical Classification: Hydrocarbons (contain hydrogen and carbon atoms), Volatile organic compounds

Summary: Benzene is a colorless liquid with a sweet odor. It evaporates into the air very quickly and dissolves slightly in water. It is highly flammable and is formed from both natural processes and human activities.


Benzene is widely used in the United States; it ranks in the top 20 chemicals for production volume. Some industries use benzene to make other chemicals which are used to make plastics, resins, and nylon and synthetic fibers. Benzene is also used to make some types of rubbers, lubricants, dyes, detergents, drugs, and pesticides. Natural sources of benzene include volcanoes and forest fires. Benzene is also a natural part of crude oil, gasoline, and cigarette smoke.

Community Members

[ToxFAQs](#) - Fact sheet that answers the most frequently asked questions about a contaminant and its health effects.

Toxicological and Health Professionals

[Toxicological Profile](#) - Succinctly characterizes the toxicologic and adverse health effects information for a hazardous substance.

[ToxGuide](#)  [75 KB] - Quick reference guide providing information such as chemical and physical properties, sources of exposure, routes of exposure, minimal risk levels, children's health, and health effects for a substance.

[Priority List of Hazardous Substances](#) - Prioritization of substances based on a combination of their frequency, toxicity, and potential for human exposure at National Priorities List (NPL) sites.

[Minimal Risk Levels \(MRL\)](#) - The MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse, non-cancer health effects over a specified duration of exposure. The information in this MRL serves as a screening tool to help public health professionals decide where to look more closely to evaluate possible risk of adverse health effects from human exposure.

[Interaction Profiles](#) - Succinctly characterizes the toxicologic and adverse health effects information for mixtures of hazardous substances.