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# 1,3-Butadiene

National Cancer Institute

## Source

National Cancer Institute. *1,3-Butadiene*. NCI Thesaurus. Code C29790.

A synthetic, colorless gas that is practically insoluble in water and soluble in ethanol, ether, acetone and benzene. It is used primarily as a monomer to manufacture many different types of polymers and copolymers and as a chemical intermediate in the production of industrial chemicals. When heated, 1,3-butadiene emits acrid fumes and is flammable. In the presence of air, it oxidizes to form explosive peroxides. The primary route of potential human exposure to this compound is inhalation. Acute exposure to 1,3-butadiene can cause irritation of the eyes, nasal passages and throat. At very high concentrations, inhalation of this gas can result in headache, fatigue, decreased blood pressure and pulse rate, central nervous system damage and unconsciousness. It is known to be a human carcinogen. (NCI05)