Gas Factsheet

Ethylbenzene



Formula: C_oH₁₀ CAS: 100-41-4 Source: Manufacturing, Coal tar, Petroleum **Detection Method:** Tiger/Tiger^{LT}/Tiger Select, Cub/Cub^{TAC}, Falco/Falco^{TAC}, TVOC 2, GasClam 2, GasCheck G

Ethylbenzene is used primarily in the production of styrene and synthetic polymers. It is used as a solvent; a constituent of asphalt and naphtha; and in synthetic rubber, fuels, paints, inks, carpet glues, varnishes, tobacco products, and insecticides. It is a component of automotive and aviation fuels. It is also used to make other chemicals, including acetophenone, cellulose acetate, diethyl-benzene, ethyl anthraquinone, ethylbenzene sulfonic acids, propylene oxide, and alpha-methylbenzyl alcohol.

C₀H₁₀ - ENTERS YOUR BODY RAPIDLY STRAIGHT THROUGH TO YOUR LUNGS

Hazard Concerns of Ethylbenzene

Ethylbenzene is mainly used in the manufacture of styrene. Acute (short-term) exposure to ethylbenzene in humans results in respiratory effects, such as throat irritation and chest constriction, irritation of the eyes, and neurological effects such as dizziness. Chronic (long-term) exposure to ethylbenzene by inhalation in humans has shown conflicting results regarding its effects on the blood. Animal studies have reported effects on the blood, liver, and kidneys from chronic inhalation exposure to ethvlbenzene.

Environmental Damage

Acute toxic effects may include the death of animals, birds, or fish, and death or low growth rate in plants. Ethylbenzene has high acute toxicity to aquatic life. It has caused injury to various agricultural crops. Insufficient data are available to evaluate or predict the short-term effects of ethylbenzene to birds or land animals.

When Ethylbenzene Enters The Body

People living in urban areas or in areas near hazardous waste sites may be exposed by breathing air or by drinking water contaminated with ethylbenzene. When you breathe air containing ethylbenzene vapour, it enters your body rapidly and almost completely through your lungs. Ethylbenzene in food or water can also rapidly and almost completely enter your body through the digestive tract. It may enter through your skin when you come into contact with liquids containing ethylbenzene. Ethylbenzene vapours do not enter through your skin to any large degree.

Chemical Properties

Ethylbenzene is a flammable and combustible liquid. Its vapours are heavier than air and may travel to a source of ignition and flash back. In liquid form, it floats on water and may travel to a source of ignition and spread fire, its combustion may produce irritants and toxic gases. Ethylbenzene may accumulate static electricity and will react with oxidising materials. It is miscible with organic solvents and soluble in alcohol and ether. It evaporates at room temperature and burns easily. It moves easily into the air from water and soil and is most commonly found as a vapour in the air.

Ethylbenzene Detection Instruments









Fixed Instruments

Instruments

Semi-Portable

Portable Instruments

Personal Instruments

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