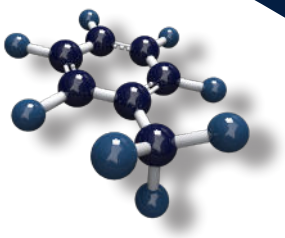
Gas Factsheet

Toluene



Formula: C_7H_8
CAS: 108-88-3
Industries: Oil Refineries, Manufacturing & Petrochemical Plants
Detection Method: Tiger Select, Cub^{TAC}, Falco^{TAC}, Titan & TVOC 2

Toluene is the common name for methylbenzene, a commercially important intermediate chemical produced throughout the world in enormous quantities. The general population is exposed to toluene mainly through inhalation of vapour in ambient air or from cigarette smoke. Apart from risks associated with occupational exposure, toluene poses special hazards to glue-sniffers, who intentionally abuse solvent mixtures containing this chemical.

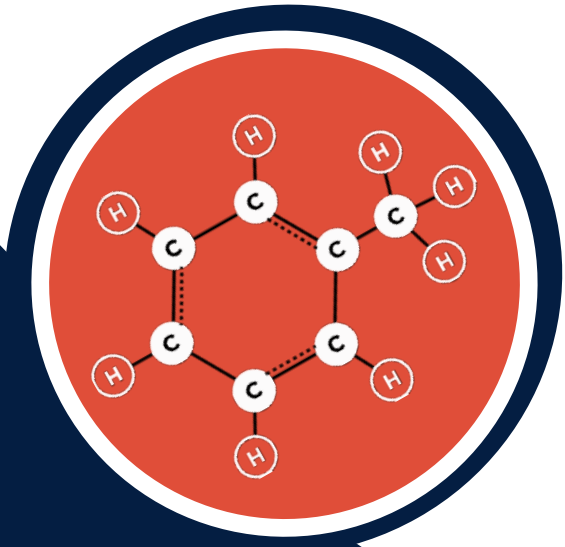
C_7H_8 - EXPOSURE CAN EFFECT THE NERVOUS SYSTEM (BRAIN AND NERVES)

Exposure Health Hazards

Toluene in air has an odour detection threshold level of 1 mg/m^3 as a 30 minutes average. When exposed to toluene in the air, it is passes directly into the blood stream via the lungs. Similarly, when products containing toluene are touched or water containing it comes into contact with the skin, it can pass through the skin into the bloodstream. Food or drink that contains toluene, can also be absorbed into the bloodstream from the digestive tract.

Factors such as age, sex, body composition and health status affect what happens once the substance is in the body.

Toluene has an effect on the nervous systems and effects can be temporary, such as headaches or dizziness. However, effects such as in-coordination, cognitive impairment, vision loss, and hearing loss may become permanent with many repeated exposures.



Source Of Toluene

Toluene also known as methyl benzene is the T in BTEX, and is most commonly used in paint thinners, contact cement, glues, oils, resins, detergents, preparation of chemicals agents, rubber, printing ink, polishes, leather tanning and disinfectants.

BTEX compounds occur naturally in crude oil and can be found in sea water in the vicinity of natural gas and petroleum deposits. Other natural sources of BTEX compounds include gas emissions from volcanoes and forest fires.

BTEX Compounds

The VOCs, benzene(B), toluene(T), ethylbenzene(E), and the isomers of xylene(X) also known as BTEX are important industrial solvents which frequently become industrial contaminants due to leakage from underground gasoline storage tanks into ground water, leaching from landfills, and discharge from factories and refineries.

Toluene Detection Instruments

Fixed Instruments

Portable Instruments

Personal Instruments

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