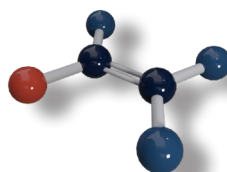


Trichloroethylene



Formula: C_2HCl_3

CAS: 79-01-6

Source: Chemical synthesis, Textile industries & Manufacturing Industries

Detection Method: Tiger, Tiger^{LT}, Cub, Falco, TVOC 2, GasClam 2 & GasCheck G

Trichloroethylene is a colourless, highly volatile liquid with a sweet chloroform-like odour. Other names for trichloroethylene include TCE, trichloroethene and ethylene trichloride. In the past, trichloroethylene was used as a grain fumigant, an extraction solvent in the food industry, an anaesthetic agent and an analgesic. It was also used in the dry cleaning industry until the mid-1950s, when it was replaced by tetrachloroethylene.

C_2HCl_3 - KNOWN TO BE A HUMAN CARCINOGEN.

Trichloroethylene (TCE)

Trichloroethylene (TCE) is a volatile, colourless liquid organic chemical. TCE does not occur naturally and is created by chemical synthesis. It is used primarily to make refrigerants and other hydrofluorocarbons and as a degreasing solvent for metal equipment. TCE is also used in some household products, such as cleaning wipes, aerosol cleaning products, tool cleaners, paint removers, spray adhesives, and carpet cleaners and spot removers. The textile processing industry use it to also scour cotton, wool, and other fabrics; in dry cleaning operations; and as a component of adhesives, lubricants, paints, varnishes, paint strippers, pesticides, and cold metal cleaners.

Ways Of Being Exposed to TCE

TCE may be found in the air, water, and soil at places where it is produced or used. It breaks down slowly and remains in the environment for a long time. It readily passes through soil and can accumulate in groundwater. People in the general population can be exposed to trichloroethylene by inhaling it in indoor and outdoor air, drinking contaminated water, or eating foods that have been washed or processed with contaminated water. Because this chemical was used extensively by the US military to degrease equipment, contaminated soil and groundwater can be found near many current and former military bases.

Exposure Affects To Health

Trichloroethylene was once used as an anesthetic for surgery. People who are overexposed to moderate amounts of trichloroethylene may experience headaches, dizziness, and sleepiness; large amounts of trichloroethylene may cause coma and even death. Some people who breathe high levels of trichloroethylene may develop damage to some of the nerves in the face. Other effects seen in people exposed to high levels of trichloroethylene include evidence of nervous system effects related to hearing, seeing, and balance, changes in the rhythm of the heartbeat, liver damage, and evidence of kidney damage. Some people who get concentrated solutions of trichloroethylene on their skin develop rashes.

Trichloroethylene Detection Instruments



Fixed Instruments



Semi-Portable Instruments



Portable Instruments



Personal Instruments

