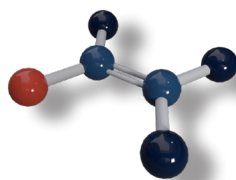


## Vinyl chloride



**Formula:** C<sub>2</sub>H<sub>3</sub>Cl

**CAS:** 75-01-4

**Source:** Soil organism break down, Landfills & Manufacturing PVC products

**Detection Method:** Tiger, Tiger<sup>LT</sup>, Cub, Falco, TVOC 2 & GasClam 2

Vinyl chloride is known also as chloroethene, chloroethylene, ethylene monochloride, or monochloroethylene. At room temperature, it is a colourless gas, it burns easily, and it is not stable at high temperatures. Vinyl chloride exists in liquid form if kept under high pressure or at low temperatures. Vinyl chloride has a mild, sweet odour, which may become noticeable at 3,000ppm.

### C<sub>2</sub>H<sub>3</sub>Cl - IS ASSOCIATED WITH AN INCREASED RISK OF A RARE FORM OF LIVER CANCER

#### What Is Vinyl Chloride?

Vinyl chloride is a colourless, flammable gas that evaporates very quickly at room temperature. It's used to make polyvinyl chloride (PVC) pipes, wire coatings, vehicle upholstery, and plastic kitchenware. Higher than normal levels of vinyl chloride may be present inside new cars as the chemical evaporates from new vinyl products.

Vinyl chloride can be formed in the environment when soil organisms break down "chlorinated" solvents. In the environment, the highest levels of vinyl chloride are found in air around factories producing vinyl products. Vinyl chloride that is released by industries or formed by the breakdown of other chlorinated chemicals can enter the air and drinking water supplies. Vinyl chloride is a common contaminant found near landfills.

#### A Manufactured Substance

Vinyl chloride is a manufactured substance that does not occur naturally; however, it can be formed in the environment when other manufactured substances, such as trichloroethylene, trichloroethane, and tetrachloroethylene, are broken down by certain microorganisms. Production of vinyl chloride in the United States grew at an average rate of about 7% from the early 1980s to the early 1990s, with current growth at about 3% annually. Most of the vinyl chloride produced in the United States is used to make a polymer called polyvinyl chloride (PVC),

#### Exposure To Vinyl Chloride

Workers at facilities where vinyl chloride is produced or used may be exposed primarily through inhalation. The general population may be exposed by inhaling contaminated air or tobacco smoke. In the environment, the highest levels of vinyl chloride are found in air around factories that produce vinyl products. If a water supply is contaminated, vinyl chloride can enter household air when the water is used for showering, cooking, or laundry.

Vinyl chloride exposure is associated with an increased risk of a rare form of liver cancer (hepatic angiosarcoma), as well as brain and lung cancers, lymphoma, and leukemia.

#### Vinyl chloride Detection Instruments



Fixed Instruments



Semi-Portable Instruments



Portable Instruments



Personal Instruments

