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# Product Safety Summary Sheet

## DuPont™ Vinyl Fluoride

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### Chemical Identification, Product Identification or Common Name:

CAS number (EC inventory): 75-02-5

CAS name: Vinyl Fluoride

EC Number: 200-832-6

IUPAC name: Fluoroethene

### Product Uses and Applications:

Vinyl Fluoride is generally used as a precursor in fluoropolymer production.

### Physical Properties of the Chemical or Product:

Vinyl Fluoride is a colorless gas (at room temperature) which possesses an ether-like odor. Vinyl Fluoride has a boiling point of -72.2 degrees Centigrade and a melting point of -160.5 Centigrade. Vinyl Fluoride will form explosive mixture in air.

### Exposure Potential

#### Workplace Exposure:

Workers should follow the recommended safety measures contained within the (Material) Safety Data Sheet (M)SDS) and on any product packaging. Employees should be trained in the appropriate work processes and safety equipment to limit exposure to chemical substances. Occupational use of this substance is considered to be safe provided the recommended safety measures in the (M)SDS) are followed.

#### Consumer exposure:

Generally the substance is used in industrial and/or professional settings; therefore, consumer exposure is not expected.

**Environmental exposure:**

The test substance is a monomer that is further bound in a polymer. The unreacted monomer is a gas under environmental conditions. If any environmental releases occur, the test substance will compartmentalize into the atmosphere.

Given the conditions of use, environmental levels of the test substance are likely to be insignificant. The water solubility of the test substance suggests that atmospheric deposition to land and water could occur. However, due to its volatility and low sorption to soil, this would likely result in rapid redistribution from both soil and water into air.

The test substance is stable to hydrolysis and is not readily biodegradable. The substance properties and use limit both direct and indirect exposure potential to aquatic and terrestrial organisms. Thus, the test substance can be expected to have low potential for bioaccumulation in aquatic and terrestrial organisms.

**Health Information**

*Note: The information contained in this section may be useful to someone handling the pure undiluted substance such as a manufacturer or transporter. Consumers are not likely to come in contact with the pure substance. For more information on health hazards and recommended protective equipment, please refer to the (M)SDS.*

Exposures may affect human health as follows:

| Effect Assessment                | Result   |
|----------------------------------|--|
| Acute Toxicity                   | Oral: No acute oral data available, since the substance is a gas.<br>Dermal: No acute dermal data available, since the substance is a gas.<br>Inhalation: High concentrations may cause headache, nausea, weakness, abnormal liver function; vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing. |
| Irritation                       | Not a skin irritant.<br>Not an eye irritant.<br>NOTE: Contact with liquid or refrigerated gas can cause cold burns or frostbite.   |
| Sensitization                    | Based on available data, not considered a sensitizer.  |
| Mutagenicity                     | Based on available data, suspected of causing genetic defects.   |
| Carcinogenicity                  | Classified as a probable human carcinogen.   |
| Toxicity after repeated exposure | Adverse effects from repeated exposure may include liver damage.   |
| Toxicity for reproduction        | No data.   |

## Environmental Information

*Note: The information contained in this section is intended to provide brief and general information of this substance's environmental impact. The results in the table below refer to testing performed with the non formulated, undiluted substance. The data does not replace the data given in the (M)SDS. For more information and recommended protective measures please refer to the (M)SDS.*

| Effect Assessment             | Result   |
|-------------------------------|--|
| Aquatic Toxicity              | Based on available data, not hazardous to aquatic environment. |
| Persistence and degradability | Not readily biodegradable.<br>Not persistent.                  |
| Bioaccumulation potential     | Not bioaccumulative.   |

## Risk Management

### Workplace Management:

Risk management measures for industrial site use include containment through engineering controls and the use of personal protective equipment (PPE) as appropriate. Always refer to the (Material) Safety Data Sheet ((M)SDS) for guidance on the appropriate personal protective equipment to be used and on the safe handling of this material.

### Consumer Risk Management:

Because Vinyl Fluoride is used in closed industrial settings, consumer exposure is not expected.

### Regulatory Information:

Always refer to the (Material) Safety Data Sheet ((M)SDS) for guidance on regulatory restrictions that may govern the manufacture, sale, transportation, use and/or disposal of this chemical or product. Regulations may vary by region, country, state, county, city, or local government.

### First Aid Information:

For all First Aid or Emergency information, consult the (Material) Safety Data Sheet ((M)SDS).

### Information Sources:

Data is compiled from a variety of sources, including publicly available documents, internal data and other sources such as, but not limited to, Chemical Safety Reports and (Material) Safety Data Sheets ((M)SDS).

### Contact Information:

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