



Product Safety Summary Sheet

DuPont™ Ethylene

Chemical Identification, Product Identification or Common Name:

CAS number: 74-85-1

CAS name: Ethylene

EC Number: 200-815-3

EC name: Ethylene

IUPAC name: Ethylene

Product Uses and Applications:

Ethylene is manufactured as a raw chemical for use as an intermediate or monomer for the production of products such as polyurethanes, rubber products, laboratory chemicals, industrial fluids, and anti-freeze. It is also used to make fuel and fuel additives.

Physical Properties of the Chemical or Product:

Ethylene is a colorless, flammable gas at room temperature with a very low melting point of -169.15°C (-272.5°F) and a very low boiling point of -103.77°C (-154.8°F).

Exposure Potential:

Workplace exposure:

Because Ethylene is a flammable gas that requires closed, controlled industrial processes, this chemical should be kept away from all heat and ignition sources. Workers should follow the recommended safety measures contained within the (Material) Safety Data Sheet ((M)SDS) and on any product packaging (if applicable). Employees should be trained in the appropriate work processes and safety equipment to limit exposure to chemical substances or release of chemical substances. Occupational use of this substance is considered to be safe provided the recommended safety measures given in the (M)SDS are followed.

Consumer exposure:

Ethylene is not sold directly to consumers and consumers are not expected to use Ethylene. Generally, consumer exposure to Ethylene is not expected as the chemical is manufactured and used in controlled industrial applications.

Environmental exposure:

Because Ethylene is a gas at normal temperatures, it will partition into the atmosphere upon its release. Ethylene has a low potential to bioaccumulate in the environment. Ethylene is also readily biodegradable. Therefore it is not considered hazardous to the environment.

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 testing data, as the substance is a gas at room temperature. Inhalation: Vapors may cause drowsiness or dizziness. Dermal: no testing data, as the substance is a gas at room temperature.
Irritation	Skin: no testing data, as the substance is a gas at room temperature. Eye: no testing data, as the substance is a gas at room temperature.
Sensitization	No testing data, as the substance is a gas at room temperature.
Mutagenicity	Not mutagenic.
Carcinogenicity	Not carcinogenic.
Toxicity after repeated exposure	Repeat-dose for inhalation showed no evidence of systemic toxicity at any concentration.
Toxicity for reproduction	Not a reproductive or developmental toxin.

Environmental Information

Note: The information in this chapter 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	Ethylene is a gas at standard temperature and pressure and is expected to partition primarily to air, therefore aquatic toxicity tests may not be relevant. In addition, it is technically difficult to maintain aqueous concentrations of

	gases for toxicity testing.
Biodegradability	Readily biodegradable.
Persistence	Not likely to persist.
Bioaccumulation potential	Low potential for bioaccumulation.

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. Engineering controls include the use of manufacturing equipment, storage containers and transportation containers that will contain the chemical and that are rated for the pressures and temperatures to which the chemical may be subjected, use of appropriate recycle and recovery equipment if applicable, and adequate ventilation as necessary at both storage and use locations.

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:

Ethylene is not sold directly to consumers and consumers are not expected to use Ethylene as a raw chemical. The use of any product containing Ethylene should only occur in well-ventilated areas or outdoors. Consumers should follow all product label information, instructions, and warnings on products containing Ethylene.

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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