# ethylene

### IDENTIFICATION NUMBERS

- **CAS:** 74-85-1
- **EC/EINECS:** 200-815-3
- **International Chemical Safety Card (ICSC):** 0475

### MORE INFORMATION

- **Molecular Formula:** C2H4
- **Synonyms:** ETENO

### USES

pesticide

## CLASSIFICATION AND LABELLING (Regulation 1272/2008)

**Symbols**



**GHS02**

Flammable gases



**GHS04**

Gases under pressure



**GHS07**

Acute toxicity (oral, dermal, inhalation

**Signal word:** **Danger**

**H Phrases**

**H220** : Extremely flammable gas

Flam. Gas (Cat. 1) : Flammable gas

**H???**

Gas a pres.,

**H336** : May cause drowsiness or dizziness

STOT SE (Cat. 3) : Specific target organ toxicity - single exposure

**Notes**

- R.1272-Note U

## Specific health risks

### According to IARC

Substances classified as carcinogens or mutagens Category 2 under the CLP Regulation (GHS), bearing H351 and/or H341 phrases. These are substances suspected of causing cancer or heritable genetic mutations in humans.

| IARC GROUP | IARC VOLUME |
| --- | --- |
| Grupo 3 | (VOL. 60; 1994) |

### Occupational Exposure Limits (OEL)

Daily exposure limit values (VLA-ED) published by the Spanish National Institute of Safety and Health at Work (INSST). They represent the average concentration of a chemical agent in the worker's breathing zone, measured or calculated in a time-weighted manner for an 8-hour daily working period. (https://www.insst.es/valores-limites-de-exposicion)

## Specific environmental risks

### Atmospheric emissions

Substances subject to atmospheric emission limitations under the Industrial Emissions Directive (2010/75/EU) and its Spanish transposition. Includes pollutants regulated in industrial installation emission permits and best available technique reference documents (BAT/BREF).

### Volatile organic compounds

Volatile Organic Compounds (VOCs) regulated by Directive 1999/13/EC on the limitation of VOC emissions from certain activities, and by Royal Decrees 117/2003 and 227/2006. Substances contributing to tropospheric ozone formation that are subject to emission limits in industrial activities.

## Environmental regulations

### LPCIC (EPER)

Priority substances and specific pollutants within the EU water policy framework, established by the Water Framework Directive (2000/60/EC) and the Priority Substances Directive (2008/105/EC and amendments). Substances posing significant risk to European surface waters and subject to Environmental Quality Standards (EQS).

| EPER WATER | EPER AIR |
| --- | --- |
| | 1 |

### EPER Air

Substances from List 2 of Annex III of the IPPC Directive (integrated into the Industrial Emissions Directive 2010/75/EU). Pollutants that may affect surface and groundwater bodies and must be considered in the integrated environmental authorisation of industrial installations.

## Restriction/prohibition regulations

### Major accident hazards (Seveso)

Hazardous substances listed in Annex I of the Seveso III Directive (Directive 2012/18/EU), transposed in Spain by Royal Decree 840/2015. Their presence in industrial establishments in quantities equal to or above established thresholds triggers obligations to implement major accident risk control measures.

### Substances under PACT evaluation

Substances under active regulatory monitoring through ECHA's PACT (Public Activities Coordination Tool). Allows tracking which regulatory authorities are examining a substance and what potential regulatory actions are being considered (restriction, SVHC identification, harmonised classification, etc.).

### Authorized Pesticide

Active substances approved for use in plant protection products (agricultural pesticides) in the European Union under Regulation (EC) No 1107/2009. Includes herbicides, fungicides, insecticides, acaricides and other crop protection agents with current European-level approval.

**SOURCE**

Real Decreto 2163/1994