# but-1-ene

### IDENTIFICATION NUMBERS

- **CAS:** 106-98-9
- **EC/EINECS:** 203-449-2
- **International Chemical Safety Card (ICSC):** 0396

### MORE INFORMATION

- **Molecular Formula:** C4H8
- **Synonyms:** 1-BUTENO

## CLASSIFICATION AND LABELLING (Regulation 1272/2008)

**Symbols**



**GHS02**

Flammable gases



**GHS04**

Gases under pressure

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

**H Phrases**

**H???**

Gas a pres.,

**H220** : Extremely flammable gas

Flam. Gas (Cat. 1) : Flammable gas

*Nota C.Nota U.*

**Notes**

- R.1272-Note C
- R.1272-Note U

## Specific health risks

### 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)

**OCCUPATIONAL EXPOSURE LIMITS**

| State / Form | TWA (ppm) | TWA (mg/m³) | STEL (ppm) | STEL (mg/m³) | Notes |
|---|---|---|---|---|---|
| — | 1000 | — | — | — | — |

## 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.).