tetraethyl orthosilicate

IDENTIFICATION NUMBERS

- **CAS:** 78-10-4
- **EC/EINECS:** 201-083-8
- **International Chemical Safety Card (ICSC):** 0333

MORE INFORMATION

- **Molecular Formula:** C8H20O4Si
- **Synonyms:** SILICATO DE ETILO, TETRAETOXI-SILANO, SILICATO DE TETRAETILO

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS02

Flammable gases



GHS07

Acute toxicity (oral, dermal, inhalation

Signal word: Warning

H Phrases

H332 : Harmful if inhaled

Acute Tox. (Cat. 4 *) : Acute toxicity

H319 : Causes serious eye irritation

Eye Irrit. (Cat. 2) : Serious eye damage/eye irritation

H226 : Flammable liquid and vapour

Flam. Liq. (Cat. 3) : Flammable liquid

H335 : May cause respiratory irritation

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

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
—	10	87	—	—	—

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.).