Perchloroethylene;tetrachloroethylene;

IDENTIFICATION NUMBERS

- **CAS:** 127-18-4
- **EC/EINECS:** 204-825-9
- **International Chemical Safety Card (ICSC):** 0076

MORE INFORMATION

- **Molecular Formula:** C2Cl4
- **Synonyms:** PER, percloroetileno

USES

degreaser, solvent, cleaner

⚠ **Black list — Substances particularly hazardous to the environment or health**

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS08

Respiratory sensitisation



GHS09

Hazardous to the aquatic environment

Signal word: **Warning**

H Phrases

H351 : Suspected of causing cancer

Carc. (Cat. 2) : Carcinogenicity

H411 : Toxic to aquatic life with long lasting effects

Aquatic Chronic (Cat. 2) : Hazardous to the aquatic environment

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 2A	63, Sup. 7, 106; 2014

Carcinogens (other sources)

Substances classified as carcinogens or mutagens Category 3 under the Dangerous Preparations Directive criteria (pre-CLP). Substances with limited evidence or indications of carcinogenicity or mutagenicity.

CATEGORY	SOURCE
G-A3, N-2, CP	ACGIH, NTP, CP65

Endocrine disruptors

Substances with endocrine disrupting activity

DISRUPTOR LEVEL
UE1

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT	LEVEL
SNC	1
SOURCE	
14, 24	

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)

OEL DATA
VLA-ED20 ppm138 mg/m3VLA-EC40 ppm275 mg/m3

Biological Exposure Indices (BEI)

Biological limit values (VLB) published by the Spanish National Institute of Safety and Health at Work (INSST). Reference values for assessing the risk of chemical agents by measuring them or their metabolites in biological matrices (blood, urine, exhaled air) of exposed workers.

BEI DATA

IB: Percloroetileno en Principio de la Aire alveolar (fracción del aire exhalado) 3 ppmIB: Percloroetileno en sangre0,4 mg/l

Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic under Regulation 1272/2008

Specific environmental risks

Aquatic toxicity (Water Framework Directive)

Substances classified with acute aquatic toxicity under the CLP Regulation (H400 phrase, Aquatic Acute 1). They present an immediate hazard to aquatic organisms, and their use or discharge can cause rapid damage to aquatic ecosystems.

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).

Soil contaminants

Substances identified as soil contaminants under Spanish and European environmental regulations. Includes substances capable of persisting in soil, bioaccumulating in the terrestrial food chain, and affecting soil ecosystems and groundwater.

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

false

EPER AIR

true

EPER SOIL

false

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

Substances under CoRAP evaluation

Substances included in the Community Rolling Action Plan (CoRAP) of the REACH Regulation. These are substances selected for evaluation by EU Member States due to indications of risk to human health or the environment, with the aim of clarifying whether regulatory action is warranted.

YEAR	MEMBER STATE
2013	Latvia

INITIAL GROUNDS FOR CONCERN

Human health/CMR; Environment/Suspected PBT; Exposure/Wide dispersive use; Aggregated tonnage

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.).

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.