Benzene, 1,2,4-trichloro-@1,2,4-trichlorobenzene

IDENTIFICATION NUMBERS

- **CAS:** 120-82-1
- **EC/EINECS:** 204-428-0
- **International Chemical Safety Card (ICSC):** 1049

MORE INFORMATION

- **Molecular Formula:** C6-H3-Cl3

USES

solvent

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS07

Acute toxicity (oral, dermal, inhalation



GHS09

Hazardous to the aquatic environment

Signal word: Warning

H Phrases

H302 : Harmful if swallowed

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

H315 : Causes skin irritation

Skin Irrit. (Cat. 2) : Skin corrosion/irritation

H400 : Very toxic to aquatic life

Aquatic Acute (Cat. 1) : Hazardous to the aquatic environment

H410 : Very toxic to aquatic life with long lasting effects

Aquatic Chronic (Cat. 1) : Hazardous to the aquatic environment

Specific health risks

Endocrine disruptors

Substances with endocrine disrupting activity

DISRUPTOR LEVEL

OSPAR

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
—	2	15	5	38	vía dérmica, VLI

Specific environmental risks

Persistent bioaccumulative and toxic

Substances identified as Persistent, Bioaccumulative and Toxic (PBT) according to the criteria of Annex XIII of the REACH Regulation. They pose a special risk of accumulation in the environment and in the food chain.

SOURCES	LINK
OSPAR	http://www.ospar.org/documents/dbase/publications/p00170/p00170_bd%20on%20trichlorobenzenes.p

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.

Hazardous water substances (Germany)

Substances classified with chronic aquatic toxicity under the CLP Regulation (H410–H413 phrases, Aquatic Chronic categories 1 to 4). They pose a long-term hazard to aquatic organisms, even at low concentrations and through prolonged exposure.

MMA CLASSIFICATION

3

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.

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).

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 SOIL
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.

EPER Soil

Substances from List 3 of Annex III of the IPPC Directive (integrated into the Industrial Emissions Directive 2010/75/EU). Substances present in waste generated by IPPC installations that must be controlled and minimised within the framework of best available techniques.

Restriction/prohibition regulations

Restricted substances under REACH

Substances listed in Annex XVII of the REACH Regulation (EC) No 1907/2006, subject to restrictions on their manufacture, placing on the market or use. Restrictions may be total or partial, limiting specific applications, maximum concentrations or user groups.

NOTES

Limitations: Shall not be placed on the market, or used, as a substance or in mixtures in a concentration equal to or greater than 0,1 % by weight for any use except: — as an intermediate of synthesis, or, — as a process solvent in closed chemical applications for chlorination reactions, or, — in the manufacture of 1,3,5-triamino — 2,4,6- trinitrobenzene (TATB). Source: Regulation 1907/2006 (REACH). Annex XVII

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.).