phenol

IDENTIFICATION NUMBERS

- **CAS:** 108-95-2
- **EC/EINECS:** 203-632-7
- **International Chemical Safety Card (ICSC):** 0070

MORE INFORMATION

- **Molecular Formula:** C6H6O
- **Synonyms:** acido carbolico, hidroxibenceno, fenilalcohol, monohidroxibenceno

USES

solvent, cleaner, decolorizing agent, pesticide

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS05

Corrosive to metals



GHS06

Acute toxicity (oral, dermal, inhalation)



GHS08

Respiratory sensitisation

Signal word: **Danger**

H Phrases

H341 : Suspected of causing genetic defects

Muta. (Cat. 2) : Germ cell mutagenicity

H331 : Toxic if inhaled

Acute Tox. (Cat. 3 *) : Acute toxicity

H311 : Toxic in contact with skin

Acute Tox. (Cat. 3 *) : Acute toxicity

H301 : Toxic if swallowed

Acute Tox. (Cat. 3 *) : Acute toxicity

H314 : Causes severe skin burns and eye damage

Skin Corr. (Cat. 1B) : Skin corrosion/irritation

H373 : May cause damage to organs through prolonged or repeated exposure

STOT RE (Cat. 2 *) : Specific target organ toxicity - repeated exposure

Labelling

Concentration	Labelling
C >= 10 %	T; R23/24/25
3 % <= C < 10 %	Xn; R20/21/22
C >= 3 %	C; R34
1 % <= C < 3 %	Xi; R36/38
	*
C >= 3 %	Corr. cut., 1B; H314
1 % <= C < 3 %	Irrit. cut., 2; H315
1 % <= C < 3 %	Irrit. oc., 2; H319

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

Grupo 3

IARC VOLUME

(VOL. 47, VOL. 71; 1999)

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT

SNC

LEVEL

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)

OCCUPATIONAL EXPOSURE LIMITS

VLA-ED2 ppm8 mg/m3VLA-EC4 ppm16 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.

BIOLOGICAL EXPOSURE INDICES

IB: Fenol en orina120 mg/g creatinina

Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic under Regulation 1272/2008

Specific environmental risks

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.

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	EPER AIR
true	true

EPER SOIL
true

EPER Water

Substances from List 1 of Annex III of the IPPC Directive (integrated into the Industrial Emissions Directive 2010/75/EU). Atmospheric pollutants —including SO_2, NOx, heavy metals and organic compounds— that must be taken into account when setting emission limit values for IPPC installations.

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

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
2015	Denmark

INITIAL GROUNDS FOR CONCERN

suspected M, other hazard, consumer use, occupational exposure, high RCR, high (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.).

MEMBER STATE	ACTIVITY
Denmark	RMOA
LAST UPDATE	**SCOPE**
2014-09-23T00:00:00	CMR

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.