nitrobenzene

IDENTIFICATION NUMBERS

- **CAS:** 98-95-3
- **EC/EINECS:** 202-716-0
- **International Chemical Safety Card (ICSC):** 0065

MORE INFORMATION

- **Molecular Formula:** C6H5NO2

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS06

Acute toxicity (oral, dermal, inhalation)



GHS08

Respiratory sensitisation

Signal word: **Danger**

H Phrases

H351 : Suspected of causing cancer

Carc. (Cat. 2.) : Carcinogenicity

H301 : Toxic if swallowed

Acute Tox. 3

H360 : May damage fertility or the unborn child

Repr. (Cat. 1B) : Reproductive toxicity

H331 : Toxic if inhaled

Acute Tox. (Cat. 3) : Acute toxicity

H311 : Toxic in contact with skin

Acute Tox. (Cat. 3) : Acute toxicity

H372 : Causes damage to organs through prolonged or repeated exposure

STOT RE 1

H412 : Harmful to aquatic life with long lasting effects

Aquatic Chronic (Cat. 3) : Hazardous to the aquatic environment

Specific health risks

Breast cancer

Substances classified with H362 phrase (may cause harm to breast-fed children). Toxic for reproduction due to effects on lactation or due to transmissibility through breast milk.

SOURCE

http://sciencereview.silentspring.org/mamm_detail.cfm?cid=98-95-3

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

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT	LEVEL
NEUROTOXICIDAD	1

SOURCE

14

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 2B	(VOL. 65; 1996)

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-ED1 mg/m30,2 ppmPosible contribución importante a la carga corporal total por exposición dérmica

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: p-Nitrofenol total en orina5 mg/g creatinina Notas:

IIB: Metahemoglobina en sangre1,5 % de metahemoglobina en hemoglobina totalNotas: F, I, S

Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic under Regulation 1272/2008

Reproductive toxicants

Substances classified as toxic for reproduction 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.

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

REACH Candidates

Substances of Very High Concern (SVHC) identified by ECHA and included on the REACH Candidate List. These are substances with CMR, PBT, vPvB or endocrine disrupting properties liable to be included in Annex XIV (authorisation). Their inclusion generates notification obligations for articles containing them.

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.).

MEMBER STATE	ACTIVITY
Austria	Hazard assessment
LAST UPDATE	**SCOPE**
2015-12-11T00:00:00	CMR; ED