1,4-dihydroxybenzene, hydroquinone, quinol@1,4-dihydroxybenzene@Hydroquinone@Quinol

IDENTIFICATION NUMBERS

- **CAS:** 123-31-9
- **EC/EINECS:** 204-617-8
- **International Chemical Safety Card (ICSC):** 0166

MORE INFORMATION

- **Molecular Formula:** C6H6O2
- **Synonyms:** 1,4-Dihidroxibenceno, 1,4-Bencenodiol, Hidroquinol, Quinol

USES

developer, solvent, cutting fluid

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS05

Corrosive to metals



GHS07

Acute toxicity (oral, dermal, inhalation



GHS08

Respiratory sensitisation



GHS09

Hazardous to the aquatic environment

Signal word: **Danger**

H Phrases

H351 : Suspected of causing cancer

Carc. (Cat. 2) : Carcinogenicity

H341 : Suspected of causing genetic defects

Muta. (Cat. 2) : Germ cell mutagenicity

H302 : Harmful if swallowed

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

H318 : Causes serious eye damage

Eye Dam. (Cat. 1) : Serious eye damage/eye irritation

H317 : May cause an allergic skin reaction

Skin Sens. (Cat. 1) : Respiratory/skin sensitization

H400 : Very toxic to aquatic life

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

Labelling

Concentration	Labelling
C >= 2,5 %	N; R50
	M=10

Specific health risks

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	ACGIH

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT	LEVEL
SNC	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 3	(VOL. 15, SUPL. 7, VOL. 71; 1999)

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	—	—	Sen

Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic under Regulation 1272/2008

Sensitisers

Substances with skin or respiratory sensitisation potential

Specific environmental risks

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

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

2012

MEMBER STATE

Italy

INITIAL GROUNDS FOR CONCERN

Human health/CMR; Exposure/Wide dispersive use, consumer use, high aggregated tonnage; Risk characterisation ratios close to 1 (human health)

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.).