divanadium pentaoxide; vanadium pentoxide

IDENTIFICATION NUMBERS

- **CAS:** 1314-62-1
- **EC/EINECS:** 215-239-8
- **International Chemical Safety Card (ICSC):** 0596

MORE INFORMATION

- **Molecular Formula:** O5V2
- **Synonyms:** pentoxido de vanadio, pentoxido de divanadio

⚠ **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



GHS09

Hazardous to the aquatic environment

Signal word: Danger

H Phrases

H341 : Suspected of causing genetic defects

Muta. (Cat. 2) : Germ cell mutagenicity

H350 : May cause cancer

Carc. (Cat. 1B) : Carcinogenicity

H361fd : Suspected of damaging fertility. Suspected of damaging the unborn child.

Repr. (Cat. 2) : Reproductive toxicity

H362 : May cause harm to breast-fed children

Lact. : Reproductive toxicity

H301 : Toxic if swallowed

Acute Tox. (Cat. 3) : Acute toxicity

H330 : Fatal if inhaled

Acute Tox. (Cat. 2) : Acute toxicity

H335 : May cause respiratory irritation

STOT SE (Cat. 3) : Specific target organ toxicity - single exposure

H372 : Causes damage to organs through prolonged or repeated exposure

STOT RE (Cat. 1) : Specific target organ toxicity - repeated exposure

H411 : Toxic to aquatic life with long lasting effects

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

Labelling

Concentration	Labelling
Inhalation:	ATE=0.05 mg/L (dust or mist)
Oral:	ATE=220 mg/kg bw'

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

G-A3, CP

SOURCE

ACGIH, CP65

Neurotoxic substances

Substances with neurotoxic effects

LEVEL

1

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 2B

IARC VOLUME

(VOL. 86; 2006)

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: Vanadio en orina50 µg/g creatininaNotas: S

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-ED0,05 mg/m3

Prohibited for breastfeeding workers

Substances prohibited for breastfeeding workers

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

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

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.).