# dicopper selenide

### IDENTIFICATION NUMBERS

- **CAS:** 20405-64-5
- **EC/EINECS:** 243-796-7

### MORE INFORMATION

- **Molecular Formula:** Cu2Se
- **Synonyms:** SELENIURO DE COBRE (I)

⚠ **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

**H301** : Toxic if swallowed

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

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

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

**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

**H331** : Toxic if inhaled

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

*Nota A.*

### Notes

- R.1272-Note A

## 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. 9, SUPL. 7;1987)

### 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 |
|---|---|---|---|---|---|
| — | — | 0.1 | — | — | — |

## 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**

1

**EPER AIR**

1

### 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.

## 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.