# cadmium cyanide

## IDENTIFICATION NUMBERS

- **CAS:** 542-83-6
- **EC/EINECS:** 208-829-1

## MORE INFORMATION

- **Molecular Formula:** C2CdN2

⚠ **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

**H330** : Fatal if inhaled

Acute Tox. (Cat. 2 *) : Acute toxicity

**H310** : Fatal in contact with skin

Acute Tox. (Cat. 1) : Acute toxicity

**H300** : Fatal if swallowed

Acute Tox. (Cat. 2 *) : Acute toxicity

**H351** : Suspected of causing cancer

Carc. (Cat. 2) : Carcinogenicity

**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

**EUH032**

**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 >= 1 % | R32 |
| C >= 0,1 % | R33 |
| C >= 0,1 % | STOT repe., 2; H373 |
| C >= 1 % | EUH032 |

## Specific health risks

### Endocrine disruptors

Substances with endocrine disrupting activity

**DISRUPTOR LEVEL**

NS

### 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 1

**IARC VOLUME**

(VOL. 58; 1993)

### Ototoxic substances

Substances with ototoxic effects

**NEUROTOXIC EFFECT**

OTOTÓXICO

**SOURCE**

25

### 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**

| Biological indicator | BEI | Sampling time | Notes |
|---|---|---|---|
| Cadmio en orina | 5 µg/g creatinina | No crítico (3) | F |
| Cadmio en sangre | 5 µg/l | No crítico (3) | F, I |

### Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic under Regulation 1272/2008

## Specific environmental risks

### Aquatic toxicity (Water Framework Directive)

Substances classified with acute aquatic toxicity under the CLP Regulation (H400 phrase, Aquatic Acute 1). They present an immediate hazard to aquatic organisms, and their use or discharge can cause rapid damage to aquatic ecosystems.

### Atmospheric emissions

Substances subject to atmospheric emission limitations under the Industrial Emissions Directive (2010/75/EU) and its Spanish transposition. Includes pollutants regulated in industrial installation emission permits and best available technique reference documents (BAT/BREF).

## 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 |
| --- | --- |
| 1 | 1 |

| EPER SOIL |
| --- |
| 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.

### 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

### Restricted substances under REACH

Substances listed in Annex XVII of the REACH Regulation (EC) No 1907/2006, subject to restrictions on their manufacture, placing on the market or use. Restrictions may be total or partial, limiting specific applications, maximum concentrations or user groups.

### 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.