captan (ISO); 1,2,3,6- tetrahydro-N-(trichloromethylthio) phthalimide

IDENTIFICATION NUMBERS

- **CAS:** 133-06-2
- **EC/EINECS:** 205-087-0
- **International Chemical Safety Card (ICSC):** 0120

MORE INFORMATION

- **Molecular Formula:** C9H8Cl3NO2S
- **Synonyms:** N-triclorometil-tio-4-ciclohexano-1,2-dicarboxamida, Captano (ISO), 1,2,3,6-tetrahidro-N-(triclorometiltio)ftalimida

USES

fungicide, pesticide, pesticide, mold, antifouling

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS05

Corrosive to metals



GHS06

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

H361f : Suspected of damaging fertility.

Repr.,2

H330 : Fatal if inhaled

Acute Tox. (Cat. 2) : Acute toxicity

H372 : Causes damage to organs through prolonged or repeated exposure

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

H318 : Causes serious eye damage

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

H317 : May cause an allergic skin reaction

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

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

Acuático crónico, 1

Labelling

Concentration	Labelling
C >= 2,5 %	N; R50
Inhalation	ATE=0.22 mg/L (dust or mist)
Skin sens.,1A; H317	C≥0,001%
	M=10
	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

G-A3, CP

SOURCE

ACGIH, CP65

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. 30, 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
—	—	5	—	—	Sen

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

Sensitisers

Substances with skin or respiratory sensitisation potential

Specific environmental risks

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).

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.

Banned biocides

Active substances whose approval for biocidal use has been denied or not renewed under Regulation (EU) No 528/2012 on biocidal products. They may not be placed on the market or used as active substances in biocidal products in the European Union.

SOURCE	EXEMPTIONS
Decisión 2007/565/CE	2008/08/22

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.).

Authorized Pesticide

Active substances approved for use in plant protection products (agricultural pesticides) in the European Union under Regulation (EC) No 1107/2009. Includes herbicides, fungicides, insecticides, acaricides and other crop protection agents with current European-level approval.

SOURCE
Real Decreto 2163/1994