1,2-bis(ethoxycarbonyl)ethyl O,O-dimethyl phosphorodithioate, containing <= 0.03 % isomalathion, malathion (ISO)@1,2-bis(ethoxycarbonyl)ethyl O,O-dimethyl phosphorodithioate, containing <= 0.03 % isomalathion, malathion (ISO)@Malathion@Carbethoxy malathion@Carbophos@Mercaptothion

IDENTIFICATION NUMBERS

- **CAS:** 121-75-5
- **EC/EINECS:** 204-497-7
- **International Chemical Safety Card (ICSC):** 0172

MORE INFORMATION

- **Molecular Formula:** C10H19O6PS2
- **Synonyms:** ((dimetoxi-fosfino-tioil)tio)butanoato de dietilo, ditiofosfato de 1,2-bis(etoxicarbonil)etilo y de O,O-dimetilo [(dimetoxifosfinotioil)tio]succinato de dietilo, (dimetoxifosfinotioiltio)succinato de dietilo, Malation

USES

insecticide, pesticide

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS07

Acute toxicity (oral, dermal, inhalation



GHS09

Hazardous to the aquatic environment

Signal word: Warning

H Phrases

H302 : Harmful if swallowed

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

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

H410 : Very toxic to aquatic life with long lasting effects

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

Labelling

Concentration	Labelling
C >= 0,025 %	N; R50
0,0025 % <= C < 0,025 %	N; R51/53
0,00025 % <= C < 0,0025 %	R52/53
	M=1000

Specific health risks

Endocrine disruptors

Substances with endocrine disrupting activity

DISRUPTOR LEVEL

NS, UE1, OSF

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT	LEVEL
NEUROPATÍA / SNC	4

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 2A	(VOL. 112; 2015)

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
Colinesterasa eritrocitaria	Reducción de la actividad al 70% del valor basal individual	Discrecional (7)	F, I, 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

State / Form	TWA (ppm)	TWA (mg/m³)	STEL (ppm)	STEL (mg/m³)	Notes
—	—	10	—	—	vía dérmica, ae, VLBc

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.).