Benzenamine, 4,4'-methylenebis-, dihydrochloride@4,4'-methylenedianilinium dichloride

IDENTIFICATION NUMBERS

- **CAS:** 13552-44-8
- **EC/EINECS:** 236-934-2

MORE INFORMATION

- **Molecular Formula:** C13-H14-N2 .2 Cl-H
- **Synonyms:** DIHIDROCLORURO DE 4,4'-METILENODIANILINA, 4,4´-METILEN-bis-DIHIDROCLORURO DE BENCENAMINA, DIHIDROCLORURO DE 4,4´-METILENDIANILINA

⚠ **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

H341 : Suspected of causing genetic defects

Muta. (Cat. 2) : Germ cell mutagenicity

H372 : Causes damage to organs through prolonged or repeated exposure

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

H331 : Toxic if inhaled

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

H311 : Toxic in contact with skin

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

H301 : Toxic if swallowed

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

H318 : Causes serious eye damage

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

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

H351 : Suspected of causing cancer

Carc. (Cat. 2) : Carcinogenicity

Nota A.

Notes

- R.1272-Note A

Labelling

Concentration	Labelling
C = 25 %:	T, N; R23/24/25-40-41-43-48/ 23/24/25-50-68
10 % = C < 25 %:	T; R20/21/22-40-41-43-48/23/24/25-68
1% = C < 10 %:	T; R20/21/22-40-43-48/ 23/24/25-68
0,2 % = C < 1 %:	Xn; R48/20/21/22
	*
C >= 1 %	STOT repe., 1; H372
0,2 % <= C < 1 %	STOT repe., 2; H373

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	SOURCE
N-2, CP	NTP, CP65

Endocrine disruptors

Substances with endocrine disrupting activity

DISRUPTOR LEVEL
NS

Carcinogens and mutagens (Regulation 1272/2008)

Substances classified as carcinogenic or mutagenic 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.