n-hexane

IDENTIFICATION NUMBERS

- **CAS:** 110-54-3
- **EC/EINECS:** 203-777-6
- **International Chemical Safety Card (ICSC):** 0279

MORE INFORMATION

- **Molecular Formula:** C6H14
- **Synonyms:** nafta, gasolina, hexano

USES

adhesive, degreaser, solvent, cleaner, fuel

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS02

Flammable gases



GHS07

Acute toxicity (oral, dermal, inhalation



GHS08

Respiratory sensitisation



GHS09

Hazardous to the aquatic environment

Signal word: **Danger**

H Phrases

H225 : Highly flammable liquid and vapour

Flam. Liq. (Cat. 2) : Flammable liquid

H304 : May be fatal if swallowed and enters airways

Asp. Tox. (Cat. 1) : Aspiration hazard

H361f : Suspected of damaging fertility.

Repr. (Cat. 2) : Reproductive toxicity

H315 : Causes skin irritation

Skin Irrit. (Cat. 2) : Skin corrosion/irritation

H336 : May cause drowsiness or dizziness

STOT SE (Cat. 3) : Specific target organ toxicity - single exposure

H411 : Toxic to aquatic life with long lasting effects

Aquatic Chronic (Cat. 2) : Hazardous to the aquatic environment

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 >= 5 %	Xn; R48/20
C >= 5 %	STOT repe., 2; H373

Specific health risks

Neurotoxic substances

Substances with neurotoxic effects

NEUROTOXIC EFFECT	LEVEL
SNP/ OTOTÓXICO	3

SOURCE

14, 24

Ototoxic substances

Substances with ototoxic effects

NEUROTOXIC EFFECT	SOURCE
SNP/ OTOTÓXICO	14, 24

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)

OEL DATA

VLA-ED20 ppm72 mg/m3

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.

BEI DATA

IB: 2,5-Hexanodiona en orina0,02 mg/lNotas: sin hidrólisis

Reproductive toxicants

Substances classified as toxic for reproduction under Regulation 1272/2008

Specific environmental risks

Hazardous water substances (Germany)

Substances classified with chronic aquatic toxicity under the CLP Regulation (H410–H413 phrases, Aquatic Chronic categories 1 to 4). They pose a long-term hazard to aquatic organisms, even at low concentrations and through prolonged exposure.

MMA CLASSIFICATION

2

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).

Volatile organic compounds

Volatile Organic Compounds (VOCs) regulated by Directive 1999/13/EC on the limitation of VOC emissions from certain activities, and by Royal Decrees 117/2003 and 227/2006. Substances contributing to tropospheric ozone formation that are subject to emission limits in industrial activities.

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

false

EPER AIR

true

EPER SOIL

false

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

Substances under CoRAP evaluation

Substances included in the Community Rolling Action Plan (CoRAP) of the REACH Regulation. These are substances selected for evaluation by EU Member States due to indications of risk to human health or the environment, with the aim of clarifying whether regulatory action is warranted.

YEAR	MEMBER STATE
2012	Germany

INITIAL GROUNDS FOR CONCERN

Human health/CMR and neurotoxicity; Exposure/Wide dispersive use, high aggregated tonnage

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.).

REACH Candidates

Substances of Very High Concern (SVHC) identified by ECHA and included on the REACH Candidate List. These are substances with CMR, PBT, vPvB or endocrine disrupting properties liable to be included in Annex XIV (authorisation). Their inclusion generates notification obligations for articles containing them.

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.