diphenyl ether, pentabromo derivative

IDENTIFICATION NUMBERS

- **CAS:** 32534-81-9
- **EC/EINECS:** 251-084-2

MORE INFORMATION

- **Molecular Formula:** C12H5Br5O
- **Synonyms:** 1,1'-oxi(bis)-pentabromo-benceno, pentaBDE, pentabromo difenil éter, BDE 71, pentabromobifenil éter, pentabromodifenilo, pentabromo bifenil éter, penta-BDE, pentabromodifenil éter

USES

flame retardant

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

CLASSIFICATION AND LABELLING (Regulation 1272/2008)

Symbols



GHS08

Respiratory sensitisation



GHS09

Hazardous to the aquatic environment

Signal word: Warning

H Phrases

H373 : May cause damage to organs through prolonged or repeated exposure

STOT RE (Cat. 2 *) : Specific target organ toxicity - repeated exposure

H362 : May cause harm to breast-fed children

Lact.,

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

Specific health risks

Endocrine disruptors

Substances with endocrine disrupting activity

DISRUPTOR LEVEL

NS, UE1

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 2B

IARC VOLUME

(VOL. 41, SUPL. 7; 1987)

Prohibited for breastfeeding workers

Substances prohibited for breastfeeding workers

Reproductive toxicants

Substances classified as toxic for reproduction under Regulation 1272/2008

Specific environmental risks

Persistent bioaccumulative and toxic

Substances identified as Persistent, Bioaccumulative and Toxic (PBT) according to the criteria of Annex XIII of the REACH Regulation. They pose a special risk of accumulation in the environment and in the food chain.

SOURCES	LINK
OSPAR	http://www.ospar.org/v_substances/get_page.asp?v1=32534819.xls

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.

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
3

Persistent organic pollutants

Substances identified as persistent organic pollutants

POP	LINK
A	http://chm.pops.int/Convention/POPsReviewCommittee/Chemicalsunderreview/Riskmanagementevaluations/tabid/243 US/Default.aspx

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	

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 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.

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.).