

GHS Classification

ID1018

Tetraalkyllead

CAS

Date Classified: Feb. 20, 2007 (Environmental Hazards: Mar. 31, 2006)

Physical Hazards

Reference Manual: GHS Classification Manual (Feb. 10, 2006)

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Explosives	Not applicable	-	-	-	There are no chemical groups associated with explosive properties present in the molecules. (Some substances correspond to four alkyl leads and have different physical chemical properties for each. They were not classified in each topic of the physical chemical hazard except those which could be considered as "Not applicable" by their molecular formulas, compositions; etc. Refer to tetramethyl lead (ID No.0046 CAS No.75-74-1) and tetraethyl lead (ID No.0582 and CAS No.78-00-2) as typical four alkyl leads.)
2 Flammable gases	Not applicable	-	-	-	Liquid or Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid or Solid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid or Solid (GHS definition)
6 Flammable liquids	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
7 Flammable solids	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	There are no chemical groups associated with explosive or self-reactive properties present in the molecule.
9 Pyrophoric liquids	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
10 Pyrophoric solids	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
12 Substances and mixtures, which in contact with water, emit flammable gases	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)
13 Oxidizing liquids	Not applicable	-	-	-	Organic compounds containing no oxygen, fluorine and chlorine.
14 Oxidizing solids	Not applicable	-	-	-	Organic compounds containing no oxygen, fluorine and chlorine.
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance)

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Classification not possible	-	-	-	The substance cannot be specified (refer to the data of individual substances). [Note] 4 alkyl leads are general terms for the lead compound which four alkyl group (C _n H _{2n+1}) combined (formula: (C _n H _{2n+1}) ₄ Pb). Since multiple agents correspond and respective properties also differents, the classification of hazardous property to the health as 4 alkyl leads is difficult. Refer to a tetramethyl lead (ID No.0046, CAS No.75-74-1) and a tetraethyl lead (ID No.0582, CAS No.78-00-2) as typical 4 alkyl leads.
1 Acute toxicity (dermal)	Classification not possible	-	-	-	A substance cannot be specified (refer to the data of individual substances).
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance.)
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance.)
2 Skin corrosion / irritation	Classification not possible	-	-	-	A substance cannot be specified (refer to the data of individual substances).
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	We cannot specify the substance (refer to the data of individual substances).

4	Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: We could not specify the substance (refer to the data of individual substances). Skin sensitization: We could not specify the substance (refer to the data of individual substances).
5	Germ cell mutagenicity	Classification not possible	-	-	-	A substance cannot be specified (refer to the data of individual substances).
6	Carcinogenicity	Not classified	-	-	-	Since the organic lead was classified into Group 3 in IARC87 (2006), it was considered as the outside of Category. In addition, the tetramethyl lead (ID No.0046, CAS No.75-74-1) and the tetraethyl lead (ID No.0582, CAS No.78-00-2) are considered as the outside of Category as organolead.
7	Toxic to reproduction	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance.)
8	Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Cause damage to organs (nervous system)	The substance was classified as Category 1 (nervous system) according to the GHS classification of the major tetra-alkyl leads, tetra-methyl lead (ID No.0046, CAS No.75-74-1) and tetraacetyl lead (ID No.0582, CAS No.78-00-2).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (nervous system)	Health hazard	Danger	Causes damage to organs (nervous system) through prolonged or repeated exposure	According to the GHS classifications of a tetramethyl lead (ID No.0046, CAS No.75-74-1) and a tetraethyl lead (ID No.0582, CAS No.78-00-2) which are typical tetraalkyl leads, we classified it into Category 1 (nervous system).
10	Aspiration hazard	Classification not possible	-	-	-	Unidentified substance (Refer to the data of an individual substance.)

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.