

## GHS Classification

**ID876**

**nickel bis(dibutyldithiocarbamate)**

**CAS 13927-77-0**

Date Classified: May 24, 2006 (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.
2 Flammable gases	Not applicable	-	-	-	Solid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Solid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Solid (GHS definition)
6 Flammable liquids	Not applicable	-	-	-	Solid (GHS definition)
7 Flammable solids	Classification not possible	-	-	-	No data available
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	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	From information that uses are for insecticides (Ullmanns (E), (5th, 1995)) or antistaling agents for rubber (Organic Compound Dictionary (1985)), it is judged that there is no spontaneous combustibility.
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid or solid substances at 140degC are not available.
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	It is known that it doesn't cause a dangerous reaction to the water on experience of manufacturing or handling. (organic compounds dictionary (1985))
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Containing no oxygen, chlorine and fluorine.
15 Organic peroxides	Not applicable	-	-	-	Containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Liquid at a test temperature, 55degC. Test methods applicable to solid substances are not available.

### Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Not classified	-	-	-	SPECIES: Rat ENDPOINT: LD50 VALUE: 17000 mg/kg REFERENCE SOURCE: RTECS (2005)
1 Acute toxicity (dermal)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	No data available
2 Skin corrosion / irritation	Classification not possible	-	-	-	No data available
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	respiratory sensitization: Classification not possible; Skin sensitization: Classification not possible	-	-	-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available

6	Carcinogenicity	Category 1A	Health hazard	Danger	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	About nickel compounds, it was classified into group 1 IARC (IARC 49 (1990)), the 1st group in Japan Assoc. of Industrial Health (industrial hygiene academic society recommendation, 2005), K in NTP(NTP RoC(11th, 2005). And A1 in ACGIH (ACGIH 7th, 2001) about the insoluble nickel compound. So it was considered as Category 1A.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	No data available.
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	No data available
10	Aspiration hazard	Classification not possible	-	-	-	No data available

### Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
11 Hazardous to the aquatic environment (acute)	Not classified	-	-	-	Since it was suggested from 96-hour LC50>100 mg/L of fishes (Rainbow trout) (AQUIRE, 2003) that relevant toxicity is not indicated in the water solubility (0.267 mg/L (PHYSPROP Database, 2005)) of this substance, it carried out the outside of Category.
11 Hazardous to the aquatic environment (chronic)	Category 4	-	-	May cause long lasting harmful effects to aquatic life	Classified into Category 4, since it is a metallic compound, and behavior in water is unknown, though no acute toxicity is reported within the saturated aqueous solution.