

GHS Classification

ID1241

dinocap

CAS 39300-45-3

Date Classified: Nov. 20, 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 classified	-	-	-	Not classified because of no appropriate data on an explosivity, though the substance contains N-O bonds as chemical groups with explosive properties present and has the oxygen balance calculated at -184.4, higher than -200 of the
2 Flammable gases	Not applicable	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Category 4	-	Warning	Combustible liquid	Category 4 because of its flash point: 67degC (PM, 13th, 2003, Pensky-Martens closed cup)
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Although the grouping relevant to explosive (N-O) was included, the grouping relevant to autoreactive was not included and the data in which autoreactive is indicated was not found, either. So it was considered outside of Category.
9 Pyrophoric liquids	Not classified	-	-	-	Uses are agricultural chemicals, and even if it contacts the normal temperature air, it does not ignite spontaneously.
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Classification not possible	-	-	-	Test methods applicable to liquid substances are not available
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	The chemical structure of the substance does not contain metals or metalloids(B, Si, P, Ge, As, Se, Sn, Sb, Te, Bi, Po, At).
13 Oxidizing liquids	Classification not possible	-	-	-	No data available
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	No data available

Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 4	Exclamation mark	Warning	Harmful if swallowed	Based on the value of LD50 = 834mg/kg calculated from the rat oral LD50 values : 980 (RTECS (2003), HSDB (2003)), 766 (RTECS (2003)) and 950mg/kg (HSDB (2003)), the substance was classified as Category 4.
1 Acute toxicity (dermal)	Not classified	-	-	-	Considering rabbit dermal LD50 = 9400mg/kg (RTECS (2003)), it was set as the outside of Category.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Liquid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Classification not possible	-	-	-	No data available
1 Acute toxicity (inhalation: dust, mist)	Category 2	Skull and crossbones	Danger	Fatal if inhaled	It was set as category 2 based on rat LC50 (4h) = 0.36mg/L (RTECS (2003)). In addition, it is presumed that the saturated concentration of this product is very low, and the inhalation test is done in mist conditions.
2 Skin corrosion / irritation	Category 2	Exclamation mark	Warning	Causes skin irritation	Since there is the description that human skin is stimulated (ICSC (J), (1997), HSDB (2003)), it was set as category 2.
3 Serious eye damage / eye irritation	Classification not possible	-	-	-	No data available
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Category 1	(Respiratory sensitization)-; (Skin sensitization)Exclamation mark	(Respiratory sensitization)-; (Skin sensitization)Warning	(Respiratory sensitization)-; (Skin sensitization)May cause allergic skin reaction	Respiratory sensitization: no data available. Skin sensitization: by repetition or the long-term contact to the human skin, since there is a report of a patch test positivity (HSDB(2003)) in addition to there is a description that sensitization of the skin may be carried out (ICSC(J)(1997)), it was referred to as Category 1.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Although there is the positive report in Ames test reporting (RTECS (2003)), other test results containing in vivo cannot be found. So it cannot be classified because of insufficient data
6 Carcinogenicity	Classification not possible	-	-	-	There is the report which suggests carcinogenic in a mouse (RTECS (2003)) and reports denies was seen (HSDB (2003)). But data is insufficient and it cannot taxonomic.
7 Toxic to reproduction	Category 2	Health hazard	Warning	Suspected of damaging fertility or the unborn child	Since teratogenicity (cleft palate, torticollis, etc) was seen in fetal animals (Catalog of teratogenic agents (2004), RTECS (2003), HSDB (2003)) in the test on mice and hamsters, a possibility of causing malformation to humans was suggested in the animal studies (ICSC (J), (1997)). So it was set as Category 2.
8 Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	Insufficient data available.

9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver)	Health hazard	Warning	may cause damage to organs (liver) through prolonged or repeated	Since there is a report that effect was observed in the liver function as a result of occupational exposure of this product (HSDB (2003) the document of Priority 2), and , that the hepatocyte necrosis was observed in the rat with given dose of the range of Category 2 in a guidance value (RTECS (2003) the document of Priority 2), it was classified into Category 2 (liver).
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)	Category 1	Environment	Warning	Very toxic to aquatic life	It was classified into Category 1 from 48-hour EC50=4.2ppb of Crustacea (Daphnia magna) (AQUIRE, 2003).
11 Hazardous to the aquatic environment (chronic)	Category 1	Environment	Warning	Very toxic to aquatic life with long lasting effects	Classified into Category 1, since acute toxicity is Category 1, supposed not rapidly degrading (BIOWIN), and bioaccumulative (log Kow=5.98 (PHYSPROP Database, 2005)).