

## GHS Classification

**ID1229**

**cartap hydrochloride**

**CAS 15263-52-2**

Date Classified: Mar. 15, 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.
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	-	-	-	Non-pyrophoric when in contact with air at a room temperature and used as agricultural chemicals.
11 Self-heating substances and mixtures	Classification not possible	-	-	-	No data 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	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Although HSDB (2003) has the description "iron, copper and zinc are corroded", test methods suitable for solid materials are not established.

### 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 LD50 = 325mg/kg in rats from Agricultural Chemical Registration Data (1994), the substance was classified as Category 4.
1 Acute toxicity (dermal)	Category 5	-	Warning	May be harmful in contact with skin	Rat LD50 > 2000mg/kg (Agricultural Chemical Registration Data (1994)). But death was observed at 1000mg/kg, it was set as Category 5.
1 Acute toxicity (inhalation: gas)	Not applicable	-	-	-	Solid (GHS definition)
1 Acute toxicity (inhalation: vapour)	Not applicable	-	-	-	The vapor pressure of this product is very low (it is 0.000025Pa at 25degC), and it was considered to be difficult to carry out vapor exposure. So it was out of a classification.
1 Acute toxicity (inhalation: dust, mist)	Category 4	Exclamation mark	Warning	Harmful if inhaled	It was set as Category 4 based on rat LC50 = 3.5mg/L/4H (Agricultural Chemical Registration Data (non-submitted)).
2 Skin corrosion / irritation	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	All of the result of the examination (an original object and five examinations by a tablet) of the rabbit of Agricultural Chemical Registration Data (1994) were corresponsive to the outside of category. But technical products of this product is valued pH2 or less, and it was set to category 1A-1C. In addition, further categorizing is difficult.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	As for the result of the examination of the rabbit (original object and six examinations by pharmaceutical) of Agricultural Chemical Registration Data (1994), most were equivalent to out of Category (only one examination of pharmaceutical is equivalent to Category 2B), the original object of this product is pH2 or less. So it was set to Category 1.
4 Respiratory/skin sensitization	Classification not possible; Skin sensitization: Not	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: in the test (technical products and formulations) of the guinea pigs of Agricultural Chemical Registration Data (1994), since skin sensitization was not accepted, it carried out the outside of Category.
5 Germ cell mutagenicity	Not classified	-	-	-	In Agricultural Chemical Registration Data (1994), there is the negative result of the dominant fatality test of the mouse, in vivo chromosome aberration test of a mouse and rat, and a bacterial reverse mutation test. So it is classified as the out of the Category.
6 Carcinogenicity	Not classified	-	-	-	Since the long-term feed-mix administrations carcinogenicity tests of rats and mice in Agricultural Chemical Registration Data (1994) did not acknowledge carcinogenicity resulting from the this product, it was carried out the outside of

7	Toxic to reproduction	Not classified	-	-	-	In the two-generation study of a rat (a reproductive study and a teratogenicity study) and the teratogenicity study of a mouse, rat, hamster, and rabbit (Agricultural Chemical Registration Data (1994)), since the mischief resulting from this product was not acknowledged, it was set as the outside of Category.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system)	Health hazard	Danger	Cause damage to organs (nervous system)	Neurological symptoms, such as a spasm and tremor, were seen in acute oral toxicity tests 3 examination in both rat and mice of Agricultural Chemical Registration Data (1994). Although the existence of the neurologic symptoms in the minimum dosage group to which death animals were not observed in any of three examinations is unknown, neurologic symptoms are discovered at dosage lower than LD50 value. Since all the dose were within the range of the guidance value of Category 1, it was considered as Category 1 (nervous system).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	In the subacute oral toxicity examination (three months) , and the chronic oral toxicity study (80 to 104 weeks) to a rat and a mouse, remarkable toxicity was not observed (Agricultural Chemical Registration Data (1994)) , so it cannot be classified because it cannot specify the target organs.
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=0.065mg/L of Crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2001).
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 was Category 1, supposed not rapidly degrading (BIOWIN), though supposed less bioaccumulative (log Kow=-0.95(PHYSPROP Database, 2005)).