

## GHS Classification

**ID1185**

**N1-[(6-Chloro-3-pyridyl)methyl]-N2-cyano-N1-methylacetamide**

**CAS 160430-64-8**

Date Classified: Sep. 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 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	Classification not possible	-	-	-	No data available
11 Self-heating substances and mixtures	Classification not possible	-	-	-	The test suitable for the solid with a melting point of 140 degC or less has not been established. (98.9 degC of melting points)
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	Not applicable	-	-	-	Organic compounds containing chlorine (but not oxygen and fluorine) and the chlorine is chemically bonded only to carbon (but not to other elements).
15 Organic peroxides	Not applicable	-	-	-	Organic compounds containing no -O-O- structure
16 Corrosive to metals	Classification not possible	-	-	-	Test methods applicable to solid substances are not available (Melting point: 98.9degC)

### Health Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
1 Acute toxicity (oral)	Category 3	Skull and crossbones	Danger	Toxic if swallowed	In two Acute Oral Toxicity tests in rats, we compared the LD50 values for male and female rats. Then for the lower of these groups we compared the LD50 values between the two tests, and selected the lower of the two. Based on the value LD50 = 146mg/kg (Agricultural Chemical Registration Data), which was the lower value of the data from the two tests, the substance was classified as Category 3.
1 Acute toxicity (dermal)	Not classified	-	-	-	It was set as the outside of Category based on the description (Agricultural Chemical Registration Data) that rat dermal LD50 >2000mg/kg and there is no death.
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	-	-	-	There are all 2 examinations of rat acute inhalation study. But they are not able to calculate LC50 value (EU Endpoints List Agricultural Chemical Registration Data), it cannot be classified.
2 Skin corrosion / irritation	Not classified	-	-	-	In the primary skin irritation test using a rabbit, it carried out the outside of Category based on the statement that there is no irritation (Agricultural Chemical Registration Data).
3 Serious eye damage / eye irritation	Not classified	-	-	-	Due to the description that it has no irritation in the eye irritation tests using rabbit (Agricultural Chemical Registration Data), it was set as the out of Category.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not classified	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: based on the statement (Agricultural Chemical Registration Data) with negativity by the Maximization method of a guinea pig, it carried out the outside of Category.
5 Germ cell mutagenicity	Not classified	-	-	-	There is no data of human multi generation epidemiology, multi generation mutagenicity test, and germ cell in vivo mutagenicity test, and there is the description that both of the result of 2 somatic cell in vivo mutagenicity test are negative (chromosome aberration using rat bone marrow cells and small core test using mouse bone marrow cells) (Agricultural Chemical Registration Data). So it is classified as the out of the Category.
6 Carcinogenicity	Not classified	-	-	-	In two carcinogenicity tests in rat and mouse, based on the description that generating of treatment-related increased tumor was not observed in each examination (Agricultural Chemical Registration Data), it was out of the Category.

7	Toxic to reproduction	Not classified	-	-	-	By two teratogenicity tests using rats and rabbits, there is a publication that teratogenicity was not admitted by all (Agricultural Chemical Registration Data). Moreover, although there was a statement the inhibition of fetal animals' weight gains and hepatocyte hypertrophy were seen in two reproduction toxicity examinations using a rat in the dose which indicates general toxicity to parental animals, but no influence on reproduction was seen (Agricultural Chemical Registration Data, EPA FACT SHEET). The effect on a child animal was considered as a secondary effect of general toxicity on parental animals. Based on the above information, 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)	It was considered as Category 1 (nerve systems) based on the description (Agricultural Chemical Registration Data ) that tremor, squatting position, hyporeactivity, decubitus position, abdominal position, salivation, urinary incontinence, ataxy, dacryorrhea, dilatation of pupil, and clonic convulsion were observed in a rat at the dose within the range of guidance value in Category 1 (less than 300mg/kg).
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (liver, thyroid gland)	Health hazard	Warning	may cause damage to organs (liver, thyroid gland) through prolonged or repeated	Because of the description that confirmation of increases in thyroid and liver weights, hepatocyte hypertrophy, decreased weight gain, and an increase of total cholesterol, with doses within the limits of the guidance value (10 – 100mg/kg) in Category 2 and higher in the repeated dose oral toxicity study with rats and mice (Agricultural Chemical Registration Data), it was classified into Category 2 (liver, thyroid gland).
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 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 48-hour EC50=77mg/L of Crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 1995).
11 Hazardous to the aquatic environment (chronic)	Category 3	-	-	Harmful to aquatic life with long lasting effects	Classified into Category 3, since acute toxicity was Category 3 and rapid degradability and bioaccumulation potential are unknown.