

GHS Classification

ID1210

Sodium cyanate

CAS 917-61-3

Date Classified: Dec. 18, 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	Not classified	-	-	-	Non-combustible (BGIA, GESTIS-database on hazardous substances, Accessed in June 2006)
8 Self-reactive substances and mixtures	Not classified	-	-	-	Although the grouping relevant to explosibility was not included and the grouping (unsaturated bonds) relevant to autoreactive was included. And it was used as pesticide, it was thought that there was no autoreactive and it was classified as outside of Category.
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (BGIA, GESTIS-database on hazardous substances, Accessed in June 2006)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (BGIA, GESTIS-database on hazardous substances, accessed in June. 2006)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Stable to water (the water solubility is obtained)
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Classification not possible	-	-	-	No data available
15 Organic peroxides	Not applicable	-	-	-	Inorganic compound
16 Corrosive to metals	Classification not possible	-	-	-	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)	Category 4	Exclamation mark	Warning	Harmful if swallowed	Based on the LD50 values in rats of 1500mg/kg (RTECS, 2006) and 1206.1mg/kg (preparation) (the Agrichemicals Newsletter Supplement No. 17, 1994), the lower value was adopted to classify the substance as Category 4.
1 Acute toxicity (dermal)	Classification not possible (Category 5 or Not classified)	-	Warning	May be harmful in contact with skin	According to rat LD50 >2000mg/kg (the agricultural newsletter supplement No. 17, 1994) of a tablet, it cannot be classified (Category 5 or outside of Category).
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 less than 0.00001Pa at 20degC), and it was considered to be difficult to carry out vapor exposure. So it was outside of classification.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	-	-	-	Classification not possible due to lack of data
2 Skin corrosion / irritation	Not classified	-	-	-	In the primary skin irritation test in rabbits of the agricultural newsletter supplement No. (1994) 17, it disappeared in 24 hours although slight erythema was seen in all patients 1 hour afterward as a result of exposing 1.0g (0.5g as this product) of samples for 4 hours, it carried out the outside of Category.
3 Serious eye damage / eye irritation	Category 2A	Exclamation mark	Warning	Causes serious eye irritation	In rabbit eye primary irritation study of the agricultural newsletter supplement No.17 (1994), as a result of prescribing 0.1g of this product for the patient in conjunctival sacs, mild to moderate corneal opacity and conjunctival redness, etc. were seen. But symptoms resolved by 14 days in non-washing eyes group, and by 10 days in the washing eyes group. So it was set as Category 2A.
4 Respiratory/skin sensitization	Respiratory sensitization: Classification not possible; Skin sensitization: Not possible	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	(Respiratory sensitization)-; (Skin sensitization)-	Respiratory sensitization: no data available. Skin sensitization: since it was negative in the skin sensitivity test (the Buehler method) of the guinea pig of the agricultural newsletter supplement No. (1994) 17, it carried out the outside of Category.
5 Germ cell mutagenicity	Classification not possible	-	-	-	Since it was negative in the small core test of the mouse of the agricultural newsletter supplement No. 17 (1994), and it is classified as the out of the Category. In addition, it was negative at the Ames test, and negative in chromosome aberration test in the in vitro mutagenicity test of the agricultural newsletter supplement No.17 (1994).
6 Carcinogenicity	Classification not possible	-	-	-	No data available

7	Toxic to reproduction	Classification not possible	-	-	-	Although teratogenic effects of this product was not acknowledged in the teratogenicity study of therabbit and rat (Agricultural newsletter supplement No. (1994) 17), the data of impact on reproductive potential is not found. And data is insufficient, it cannot classify.
8	Specific target organs/systemic toxicity following single exposure	Category 1 (central nervous system)	Health hazard	Danger	Cause damage to organs (central nervous system)	Since the seizure induction effect was observed at 100mg/kg of oral administration in the general pharmacology studies in the mouse of the agricultural newsletter supplement No. (1994) 17, it was considered as Category 1 (central nervous systems) by comparison with a guidance value.
9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (nervous system)	Health hazard	Warning	May cause damage to organs (nervous system) through prolonged or repeated exposure	There is a statement that the influence on an optic nerve (change of a visual field) was observed in human repeated exposure (RTECS (2006) of Priority 2 document). Moreover, although an exposure periods is less than (3-10 days) 14 days, there is a report that the influence on the peripheral nervous system and central nervous system (flaccid paralysis, and somnolence) was observed in the mouse and the guinea pig (RTECS, 2006). As mentioned above, it was classified into Category 2 (nervous systems).
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)	Classification not possible	-	-	-	No data available
11 Hazardous to the aquatic environment (chronic)	Classification not possible	-	-	-	No data available.