GHS Classification

ID1035 **tripotassium hexacyanocobaltate**

CAS 13963-58-1 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	–	–	–	Although it is inorganic cyanides and considered as nonflammable, there is no data.
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, although it is considered to be nonflammable inorganic cyanides (with no spontaneous combustibility).
11	Self-heating substances and mixtures	Classification not possible	–	–	–	Although it is considered to be inorganic cyanides and nonflammable (with no self-febrility), no data.
12	Substances and mixtures, which in contact with water, emit flammable gases	Not classified	–	–	–	Stable to water (readily soluble)
13	Oxidizing liquids	Not applicable	–	–	–	Solid (GHS definition)
14	Oxidizing solids	Not applicable	–	–	–	Inorganic compounds containing no oxygen and halogen.
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	SPECIES: Mouse ENDPOINT: LD50 VALUE: 1529mg/kg REFERENCE SOURCE: RTECS(2003)
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	(Respiratory sensitization)–; (Skin sensitization)–	(Respiratory sensitization)–; (Skin sensitization)–	(Respiratory sensitization)–; (Skin sensitization)–	Respiratory sensitization: Although it had the respiratory sensitizing property as cobalt or cobalt compound in the Japanese Society for Occupational Allergy (2004), Jpan Society for Occupational Health advice (2004), and MAK/BAT (2004), there was no data about this product, therefore we could not classify it for the insufficiency of the data. Skin sensitization: Although it had the cutaneous sensitizing property as cobalt or cobalt compound in the Japanese Society for Occupational Allergy (2004), Jpan Society for Occupational Health advice (2004), and MAK/BAT (2004), there was no data about this product, therefore we could not classify it for the insufficiency of the data.
5	Germ cell mutagenicity	Classification not possible	–	–	–	Without data. (It has classified with 3A as inorganic cobalt compound in MAK/BAT (2004). Germ-cell mutagenicity is suspected.)

6	Carcinogenicity	Category 2	Health hazard	Warning	Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)	It was considered as Category 2 from the classification (respectively Group 2B, A3, 2B) as a cobalt compounds of IARC52 (1991), ACGIH-TLV (2004), and industrial hygene academic recommendation (2004).
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	Category 1 (respiratory organs, cardiovascular system)	Health hazard	Danger	Causes damage to organs (respiratory organs, cardiovascular system) through prolonged or repeated exposure	Although there is no data about this product, in ACGIH-TLV (2004; Priority 1 document), it is supposed that it has effect on the respiratory systems (asthma, lungs) and the cardiovascular system in repeated exposure of inorganic cobalt compounds. Therefore we classified it into Category 1 (the respiratory systems, cardiovascular 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.