

## GHS Classification

**ID1036**

**dipotassium tetracyanonickolate**

**CAS 14220-17-8**

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 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 3	Skull and crossbones	Danger	Toxic if swallowed	SPECIES: Mouse ENDPOINT: LD50 VALUE: 275mg/kg REFERENCE SOURCE: RTECS(2004)
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 nickel or nickel 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 nickel or nickel compound in the Japanese Society for Occupational Allergy (2004), Japan Society for Occupational Health advice (2004), and MAK/BAT (2004), there was no data about this product, therefore we could not classify it for theinsufficiency of the data.
5 Germ cell mutagenicity	Classification not possible	-	-	-	No data available

6	Carcinogenicity	Classification not possible	-	-	-	IARC49 (1990) and NTP RoC (11th, 2005) are equivalent to Category 1A, as a nickel compounds (respectively Group 1, "Known to be human carcinogens"), industrial hygiene academic recommendation (2004) is equivalent to Category 2 (2B) as nickel, IRIS (1991) and ACGIH-TLV (2004) are equivalent to out of Category as a soluble inorganic nickel compound, (respectively "has not evaluated. . . as a class of compounds, for potential human carcinogenicity", and A4). And evaluation are roughly divided. It cannot be classified.
7	Toxic to reproduction	Classification not possible	-	-	-	No data available
8	Specific target organs/systemic toxicity following single exposure	Category 3 (respiratory tract irritation)	Exclamation mark	Warning	may cause respiratory irritation or may cause drowsiness and dizziness (respiratory tract irritants)	No data available. NOTE: Classified into Category 3(Respiratory tract irritation). It is based on the evidence that selenium compounds are respiratory tract irritants (ACGIH-TLV (2004)).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (central nervous system)	Health hazard	Danger	causes damage to organs (central nervous system) through prolonged or repeated	Although there is no data about this product, in ACGIH-TLV (2004; Priority 1 document), it is supposed that it has effect on the central nervous systems by repeated exposures of soluble inorganic nickel compounds. Therefore we classified it into Category 1 (central 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)	Category 3	-	-	Harmful to aquatic life	It was classified into Category 3 from 96-hour LC50=39000microg/L of fishes (Guppy) (AQUIRE, 2003).
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 it is a metallic compound, behavior in water and bioaccumulative potential are unknown.