

GHS Classification

ID291

Selenic acid

CAS 7783-08-6

Date Classified: Jun. 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	—	—	—	Containing no chemical groups with explosive properties
2 Flammable gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
3 Flammable aerosols	Not applicable	—	—	—	Not aerosol products
4 Oxidizing gases	Not applicable	—	—	—	Classified as "solid" according to GHS definition
5 Gases under pressure	Not applicable	—	—	—	Classified as "solid" according to GHS definition
6 Flammable liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
7 Flammable solids	Not classified	—	—	—	Non-flammable (HSDB, 2006)
8 Self-reactive substances and mixtures	Not applicable	—	—	—	Containing no chemical groups with explosive or self-reactive properties
9 Pyrophoric liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
10 Pyrophoric solids	Not classified	—	—	—	Non-combustible (HSDB, 2006)
11 Self-heating substances and mixtures	Not classified	—	—	—	Non-combustible (HSDB, 2006)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	—	—	—	Stable to water (readily soluble in water, Merck (13th, 2001))
13 Oxidizing liquids	Not applicable	—	—	—	Classified as "solid" according to GHS definition
14 Oxidizing solids	Not classified	—	—	—	No data available, though being inorganic compounds containing oxygen. Classified into Class 8 (UN#1905) (UN Recommendations on the Transport of Dangerous Goods)
15 Organic peroxides	Not applicable	—	—	—	Not organic compounds
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)	Classification not possible	—	—	—	No data available
1 Acute toxicity (dermal)	Classification not possible	—	—	—	No data available
1 Acute toxicity (inhalation: gas)	Not applicable	—	—	—	Due to the fact that the substance is "solid" according to the GHS definition and inhalation of its gas is not expected.
1 Acute toxicity (inhalation: dust, mist)	Classification not possible	—	—	—	No data available
2 Skin corrosion / irritation	Classification not possible	—	—	—	No data available. Although selenium oxide is a strong acid and the pH of its aqueous solution is expected not to exceed 2, no description specifying the pH could be found, so classification by pH was not conducted.
3 Serious eye damage / eye irritation	Classification not possible	—	—	—	No data available. Although selenium oxide is a strong acid and the pH of its aqueous solution is expected not to exceed 2, no description specifying the pH could be found, so classification by pH was not conducted.
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: No data available Skin sensitization: No data available
5 Germ cell mutagenicity	Classification not possible	—	—	—	No data available
6 Carcinogenicity	Not classified	—	—	—	Due to the fact that the substance is classified as Category D by EPA (1993) and Group 3 by IARC (1987).
7 Toxic to reproduction	Classification not possible	—	—	—	No data available
8 Specific target organs/systemic toxicity following single exposure	Category 1 (nervous system, respiratory organs, liver, muscle, kidneys, heart)	Health hazard	Danger	Causes damage to organs (nervous system, respiratory organs, liver, muscle, kidneys, heart)	Classified based on the effects assessment of inorganic selenium compounds. The acute toxicity of inorganic selenium compounds manifests in humans as "clinical findings including vomiting, diarrhea, laboured breathing, weakness, unstable gait, coma, histological findings including pulmonary edema, necrosis of the liver, degeneration of the skeletal muscles, renal tubular hydropic degeneration, swelling and rupture of the myocardial mitochondria" (PATTY (4th, 2000)).
9 Specific target organs/systemic toxicity following repeated exposure	Classification not possible	—	—	—	No data available
10 Aspiration hazard	Classification not possible	—	—	—	No data available

Environmental Hazards

Hazard class	Classification	symbol	signal word	hazard statement	Rational for the classification
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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