

## GHS Classification

**ID1145**

**Sodium chlorate**

**CAS 7775-09-9**

Date Classified: Feb. 20, 2007 (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 classified	-	-	-	Not classified based on UNRTDG No. 1495, Class: 5.1, PGIII, though containing O-Halogen bonds as chemical groups associated with explosive properties present.
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 (ICSC (1999))
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Classified in oxidizing solids
9 Pyrophoric liquids	Not applicable	-	-	-	Solid (GHS definition)
10 Pyrophoric solids	Not classified	-	-	-	Non-combustible (ICSC, 1999)
11 Self-heating substances and mixtures	Not classified	-	-	-	Not combustible (ICSC (1999))
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	Category 2	Flame over circle	Danger	May intensify fire; oxidizer	UNRTDG No. 1495, Class: 5.1; PG II.
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)	Not classified	-	-	-	SPECIES: Rat (female and male); ENDPOINT: LD50; > 5000 mg/kg; REFERENCE SOURCE: Agricultural Chemicals Registration Data (1973)
1 Acute toxicity (dermal)	Not classified	-	-	-	Since both male and female are rat LD50 >5000mg/kg (Agricultural Chemical Registration Data, 1973).
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)	Not classified	-	-	-	Since a both sex rat LC50 was >5mg/L (Agricultural Chemical Registration Data, 1990).
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)-	No data available
5 Germ cell mutagenicity	Classification not possible	-	-	-	There is no in vivo test data and it cannot be classified. In addition, in an Ames test and chromosome aberration test of the in vitro test, it was negative (Agricultural Chemical Registration Data, 1979, 1990).
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	In the teratogenicity study using rat and rabbit, although effect was not seen (Agricultural Chemical Registration Data, 1990, 1991), the effect on reproductive potential was not considered, and it cannot classify.

8	Specific target organs/systemic toxicity following single exposure	Classification not possible	-	-	-	In oral single administration tests in rats (4.94 – 10.25g/kg), black-ization of the internal organs which is inferred to be based on methemoglobin formation is observed in fatal cases (Agricultural Chemical Registration Data, 1973), and in the inhalation exposure test (5.10mg/L) in rats for 4 hours, an irritant effect was observed in nasal anastomotic part and eyes (Agricultural Chemical Registration Data 1990), but it was presupposed that it cannot be classified due to the either unknown knowledge in the guidance value in Category 2 (respectively 300 – 2000mg/kg, 4 1.0–5.0mg/L /hours).
9	Specific target organs/systemic toxicity following repeated exposure	Classification not possible	-	-	-	In the 13-week, feeding oral administrations of toxicity studies with rats, although the toxicity, such as decrease of erythrocyte numbers and low hemoglobin levels was observed at doses of 10000 ppm or more, there was no sign of toxicity at doses of 2000 ppm (118mg/kg/day for male, 119mg/kg/day for female) or less, which is more than the guidance value (10–100mg/kg/day) of Category 2 (Agricultural Chemical Registration Data, 1974). The influence of other exposure paths is unknown and cannot be classified for lack of data.
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)	Not classified	-	-	-	It carried out the outside of Category from 48-hour EC50>100mg/L of Crustacea (Daphnia magna) (Agricultural Chemical Registration Data, 2004).
11 Hazardous to the aquatic environment (chronic)	Not classified	-	-	-	Since not water-insoluble (water solubility=1.00*105mg/L(PHYSROP Database, 2005)) and acute toxicity is low.