

## GHS Classification

**ID594**

**Hydrobromic acid**

**CAS 10035-10-6**

Date Classified: Jul. 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	-	-	-	Gas (GHS definition)
2 Flammable gases	Not classified	-	-	-	Non-combustible (Hommel, 1991; ICSC(J), 2001)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not classified	-	-	-	UNRTDG Class: 2.3
5 Gases under pressure	Liquefied gas	Gas cylinder	Warning	Contains gas under pressure; may explode if heated	Liquefied gas because of the critical temp: >65degC and the steam pressure: >3 atm at 20degC.
6 Flammable liquids	Not applicable	-	-	-	Gas (GHS definition)
7 Flammable solids	Not applicable	-	-	-	Gas (GHS definition)
8 Self-reactive substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
9 Pyrophoric liquids	Not applicable	-	-	-	Gas (GHS definition)
10 Pyrophoric solids	Not applicable	-	-	-	Gas (GHS definition)
11 Self-heating substances and mixtures	Not applicable	-	-	-	Gas (GHS definition)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not applicable	-	-	-	Gas (GHS definition)
13 Oxidizing liquids	Not applicable	-	-	-	Solid (GHS definition)
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Gas (GHS definition)
16 Corrosive to metals	Classification not possible	-	-	-	Test methods 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)	Category 3	Skin and crossbones	Danger	Toxic if inhaled	It was considered as Category 3 based on rat inhalation LC50 = 1430ppm (4hr) (ACGIH (2004)).
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
1 Acute toxicity (inhalation: dust, mist)	Not applicable	-	-	-	Gas (GHS definition)
2 Skin corrosion / irritation	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	It was classified as Category 1A-1C based on the report of necrosis on human skin (DFGOT vol.13 (1999)) and a statement about corrosivity (ICSC (J) (2001)).
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	It was set as Category 1 based on the report (DFGOT vol.13 (1999)) of the serious eye membrane stimulus by humans (DFGOT vol.13 (1999)), and a statement called corrosiveness (ICSC (J), (2001)).
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	-	-	-	No data available
6 Carcinogenicity	Classification not possible	-	-	-	No data available
7 Toxic to reproduction	Classification not possible	-	-	-	No data available

8	Specific target organs/systemic toxicity following single exposure	Category 1 (respiratory organs)	Health hazard	Danger	Cause damage to organs (respiratory organs)	By the inhalation test of the rat within the guidance value of Category 1, necrosis of turbinates and fibrinonecrotic tracheitis are reported (ACGIH (2004)). Since serious stimuli of the nose and upper airway, bronchopneumonia and acute pulmonary edemas, etc. were also reported in humans (DFGOT vol.13 (1999)). So it was set as Category 1 (respiratory tracts).
9	Specific target organs/systemic toxicity following repeated exposure	Category 1 (respiratory organs, tooth)	Health hazard	Danger	Causes damage to organs (respiratory organs, tooth) through prolonged or repeated exposure	It was classified to as Category 1 (the respiratory system, tooth) based on the report of tooth decalcification, change of gums (DFGOT vol.13 (1999)), and a cough, breathlessness, and a progressive obliterative bronchiolitis (PATTY (5th, 2001)) in humans.
10	Aspiration hazard	Not applicable	-	-	-	Gas (GHS definition)

### 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.