

## GHS Classification

**ID744**

**boron tribromide**

**CAS 10294-33-4**

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	-	-	-	There are no chemical groups associated with explosive properties present in the molecules.
2 Flammable gases	Not applicable	-	-	-	Liquid (GHS definition)
3 Flammable aerosols	Not applicable	-	-	-	Not aerosol products
4 Oxidizing gases	Not applicable	-	-	-	Liquid (GHS definition)
5 Gases under pressure	Not applicable	-	-	-	Liquid (GHS definition)
6 Flammable liquids	Not classified	-	-	-	Non-combustible (ICSC(J), 2001; Hommel, 1991; HSDB, 2005).
7 Flammable solids	Not applicable	-	-	-	Liquid (GHS definition)
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 classified	-	-	-	Non-combustible (ICSC, 2001; Hommel, 1991; HSDB, 2005)
10 Pyrophoric solids	Not applicable	-	-	-	Liquid (GHS definition)
11 Self-heating substances and mixtures	Not classified	-	-	-	Non-combustible (ICSC, 2001; Hommel, 1991; HSDB, 2005)
12 Substances and mixtures, which in contact with water, emit flammable gases	Not classified	-	-	-	Metalloid (boron) is contained. Although it reacts violently with water and gas is generated, the generated gas is hydrogen bromide (nonflammable) (ICSC (2001)), it considered as the outside of category.
13 Oxidizing liquids	Not classified	-	-	-	Not classified because of UNRTDG Class: 8 though inorganic compounds containing halogen (bromine).
14 Oxidizing solids	Not applicable	-	-	-	Liquid (GHS definition)
15 Organic peroxides	Not applicable	-	-	-	Inorganic substance
16 Corrosive to metals	Classification not possible	-	-	-	Classification not possible due to lack of data. UNRTDG Class: 8

### 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	-	-	-	Liquid (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	Category 1A-1C	Corrosion	Danger	Causes severe skin burns and eye damage	Based on descriptions that it is corrosive on humans and caused redness, burn, pain, and blisters (ICSC (J), (2001), HSDB (2005)), it was classified as Category 1A-1C.
3 Serious eye damage / eye irritation	Category 1	Corrosion	Danger	Causes serious eye damage	It was set as Category 1 based on statements that it is a skin corrosive substance, there is caustic strong for eye in humans, and there is an example which bequeathed the scar strong against a cornea and a conjunctiva (HSDB (2005)), and the statement that redness, a pain, and severe burns are produced in an eye (ICSC (J), (2001), HSDB (2005)).
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 2 (respiratory)	Health hazard	Warning	May cause damage to organs (respiratory)	There is the statement that pulmonary edemas is produced in humans (HSDB (2005)), and respiratory irritation, such as cough, breathlessness, and a throat pain (ICSC (J) (2001), HSDB (2005)). And it is classified into Category 2 (respiratory systems).

9	Specific target organs/systemic toxicity following repeated exposure	Category 2 (respiratory organs)	Health hazard	Warning	may cause damage to organs (respiratory organs) through prolonged or repeated	In humans, the lung irritation,bronchitis,kidney disorders,effects on the nervous system are observed (HSFS (1998)), however, it was classified into Category 2 (respiratory systems) adjust to be classified into Category 2 (respiratory systems) by single exposures.
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.