

## GHS Classification

**ID1119**

**antimony trifluoride**

**CAS 7783-56-4**

Date Classified: Mar. 15, 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 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  | Not classified              | -      | -           | -                | Non-combustible (HSDB, 2003)  |
| 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  | Not classified              | -      | -           | -                | Non-combustible (HSDB, 2003)  |
| 11 Self-heating substances and mixtures                                       | Not classified              | -      | -           | -                | Not combustible. (HSDB (2003))  |
| 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   | Classification not possible | -      | -           | -                | No data available   |
| 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 4  | Exclamation mark                                    | Warning   | Harmful if swallowed                                | SPECIES: Mouse<br>ENDPOINT: LD50<br>VALUE: 804 mg/kg<br>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             | Category 2  | Exclamation mark                                    | Warning   | Causes skin irritation                              | From the description of "skin is stimulated violently and a burn is caused"(HSFS, 2004;SITTIG, 4th, 2002) and the description of "it is corrosive to the skin"(HSDB, 2003), it was thought that there was severe skin irritations and was set as category 2.        |
| 3 Serious eye damage / eye irritation     | Category 2A   | Exclamation mark                                    | Warning   | Causes serious eye irritation                       | Due to the descriptions that "it irritates to the eye severely and causes damages (HSFS, 2004; SITTIG, 4th, 2002), and that it is "corrosive to the eye" (HSDB, 2003), it is supposed to have severe eye irritation. Therefore, it was classified into Category 2A. |
| 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   | -   | -   | -   | Without data.<br>(It has classified with 3A as inorganics antimony compounds according to MAK/BAT (2005). Germ-cell mutagenicity is suspected.)   |

|    |  |  |                  |         |  |   |
|----|--|--|------------------|---------|--|---|
| 6  | Carcinogenicity  | Category 2                                     | Health hazard    | Warning | Suspected of causing cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard) | It is classified into 2B as antimony compounds in industrial hygiene academic society advice (2004). It was classified into Category 2.   |
| 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 irritation)                                | ACGIH-TLV (2004), a Priority 1 document, reports that in the forms of fluorides and antimony compounds the substance has airway irritant properties. The substance was classified as Category 3 (airway irritant) because there are reports of airway irritant properties in SITTIG (4th, 2002) and HSFS (2004) (Priority 2 documents) as well.   |
| 9  | Specific target organs/systemic toxicity following repeated exposure | Category 1 (bone, lung, cardiovascular system) | Health hazard    | Danger  | Causes damage to organs (bone, lung, cardiovascular system) through prolonged or repeated exposure                                   | It is supposed that it has the influence on a bone by as fluoride and the effects on lungs, the cardiovascular system by as antimony compound (ACGIH-TLV (2004) of Priority 1 document). Since there was the same description also in SITTIG (4th, 2002) , HSFS (2004), and HSDB (2003) of Priority 2 document, it was classified into Category 1 (a bone, lungs, cardiovascular system). |
| 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.              |