

## GHS Classification

**ID1082**

**calcium hexafluoroarsenate**

**CAS 17068-86-9**

Date Classified: Nov. 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              | -      | -           | -                | 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  | Classification not possible | -      | -           | -                | No data available   |
| 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              | -      | -           | -                | The use was for an agricultural chemical (insecticide), and it was thought that there was no spontaneous combustibility. Thus, it was defined as "out of Category". |
| 11 Self-heating substances and mixtures                                       | Classification not possible | -      | -           | -                | No data available   |
| 12 Substances and mixtures, which in contact with water, emit flammable gases | Not classified              | -      | -           | -                | Stable to water (insoluble in water)  |
| 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)                   | Classification not possible   | -   | -   | -   | No data available  |
| 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             | Classification not possible   | -   | -   | -   | No data available  |
| 3 Serious eye damage / eye irritation     | Category 2B   | -   | Warning   | Causes eye irritation                               | Although there was no data about this product, due to the description that fluoride irritates to the eye (ACGIH-TLV, 2005; ACGIH 7th, 2001), it was classified into Category 2B.   |
| 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.<br>Skin sensitization : although there is no data of this substance itself, skin sensitization may be indicated to humans as an inorganic arsenic, but it is not a deterministic conclusion (ATSDR, 2005;HSG, 1992), in addition, it was presupposed that it cannot classify from the description in the humans of EHC 224 (2001) "development of the skin sensitization of inorganic arsenic is rare" since data is insufficient. |
| 5 Germ cell mutagenicity                  | Classification not possible   | -   | -   | -   | Without data. In addition, arsenic and inorganic arsenic compound are classified into the germ-cell mutagenicity category 3A (equivalent for GHS Category 1B-2) according to DFG (MAK/BAT, 2005).  |

|    |  |  |               |         |  |  |
|----|--|--|---------------|---------|--|--|
| 6  | Carcinogenicity  | Category 1A  | Health hazard | Danger  | May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)  | Since arsenic and arsenic compound are categorized into the human carcinogens in IARC Suppl.7 (1987), ACGIH-TLV (2004), and MAK/BAT (2004), it was classified into Category 1A.  |
| 7  | Toxic to reproduction  | Category 2   | Health hazard | Warning | Suspected of damaging fertility or the unborn child  | There is no data of this product, but in ACGIH (7th, 2001), ATSDR (draft, 2005), EHC 224 (2001), and DFGOT vol.21 (2005) there was an opposite report. Since the reproductive and developmental toxicity knowledge by inorganic arsenic was indicated in laboratory animals, it was considered as category 2.  |
| 8  | Specific target organs/systemic toxicity following single exposure   | Category 1 (digestive system, cardiovascular system, nervous system, kidneys, liver, respiratory)                                  | Health hazard | Danger  | Cause damage to organs (digestive system, cardiovascular system, nervous system, kidneys, liver, respiratory)  | Although there are no data for the substance itself, the substance was classified as Category 1 (gastrointestinal system, cardio-vascular system, nervous system, kidneys, liver, respiratory system). Based on the reports that in the forms of the arsenic and inorganic arsenic compounds it causes "symptoms in the gastrointestinal organs, disorders in the functions of the cardio-vascular and nervous systems, myelosuppression, alteration in the blood system and nephropathy" in humans (EHC 224 (2001)), and that it affects the liver, upper airways and lungs (ACGIH (7th, 2001)), and that the fluorides display airway irritant properties (ACGIH-TLV, 2005; ACGIH 7th, 2001).  |
| 9  | Specific target organs/systemic toxicity following repeated exposure | Category 1 (digestive system, cardiovascular system, nervous system, kidneys, liver, blood system, skin, respiratory organs, bone) | Health hazard | Danger  | Causes damage to organs (digestive system, cardiovascular system, nervous system, kidneys, liver, blood system, skin, respiratory organs, bone) through prolonged or repeated exposure | Although there was no data of this product itself, the description in human of EHC 224 (2001) about arsenic and inorganic arsenic compounds "gastrointestinal tract disorder, neuropathy, effect on blood system, and disorder of cardiovascular system, kidney and liver were observed. Target organ are gastrointestinal, heart, brains and kidney. The skin, marrow and peripheral nerves were also affected." and in addition, based on the effect on the upper respiratory tract and lungs (ACGIH (7th, 2001)), and fluorides indicates the effect (fluorosis) on respiratory tract stimulative and a bone (ACGIH-TLV, 2005; ACGIH 7th, 2001), therefore it was classified into Category 1 (digestive tract, cardiovascular systems, a nervous systems, the kidney, liver, a blood system, the skin, a respiratory system, bone). |
| 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.              |