



MATERIAL SAFETY DATA SHEETS

40

Antimonypentafluoride

1. CHEMICAL IDENTITY

Chemical Name : Antimonypentafluoride

Chemical Classification: Toxic

Trade Name :

Synonyms: Antimony(V) fluoride, Pentafluoroantimony, Antimony fluoride

Formula : F5Sb

CAS No: 7783-70-2

UN No: 1732

Regulated Identification

Shipping Name :

Hazchem Code : 4W

Codes / Label : Class 8, Toxic

Hazardous Waste ID No :

| HAZARDOUS INGREDIENTS | C.A.S. No. | HAZARDOUS INGREDIENTS | C.A.S. No. |
|-------------------------|------------|-----------------------|------------|
| 1 Antimonypentafluoride | 7783-70-2 | 3 | |
| 2 | | 4 | |

2. PHYSICAL / CHEMICAL DATA

Boiling Pt. °C: 149.4

Physical State: Liquid

Appearance: A colorless, oily liquid.

Melting Pt °C: 7

Vapour Pressure @ 35°C mmHg: 10

Odour: Sharp odour.

Vapour Density(Air =1): 2.2

Solubility in water at 30°C g/100ml: Decomposes

Others: Soluble in potassium fluoride (KF), liquid sulfur dioxide. Reacts with water and moisture to form hydrofluoric acid.

Specific Gravity (Water =1): 3.097 at 25.8°C

pH :

3. FIRE / EXPLOSION HAZARD DATA

Flammability : No

LEL:

Flash Point °C in OC:

TDG Flammability:

UEL:

Flash Point °C in CC:

Autoignition Temperature °C :

Explosion sensitivity to impact:

Explosion sensitivity to static Electricity:

Hazardous Combustion Products : Fire will produce irritating, corrosive and/or toxic gases.

Hazardous Polymerization : May occur.

Combustible Liquid: No

Explosive Material:

Corrosive Material

Flammable Material: No

Oxidiser :

Others:

Pyrophoric Material:

Organic Peroxide :

4. REACTIVITY DATA

Chemical Stability : Stable under normal temperatures and pressures.

Incompatibility with other material : Phosphates; strong oxidizing agents; strong acids; bases; metals.

Reactivity : Hydrofluoric acid is formed from reaction with water & moisture, which

may react with metals forming hydrogen gas. Ignites in contact with phosphorus.

Hazardous : Hydrogen fluoride, antimony/antimony oxides.

Reaction Products

5. HEALTH HAZARD DATA

Routes of entry: Inhalation, Ingestion, Skin and Eyes

Effects of Exposure / Symptoms:

Inhalation : May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Ingestion: May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. Skin: Contact with liquid is corrosive and causes severe burns and ulceration. Eye: Contact with liquid is corrosive to the eyes and causes severe burns.

Emergency Treatment :

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

| | | | |
|------------------------------------|-----------------------|-------------------------|-----------------------|
| LD50 (oral-rat) mg/kg: | | STEL: | |
| LC50 (rat) mg/kg: | | Odour Threshold: | |
| Permissible Exposure Limit: | 0.5 mg/m ³ | TLV (ACGIH) : | 2.5 mg/m ³ |

| NFPA Hazard Signals | Health | Flammability | Reactivity | Special |
|----------------------------|---------------|---------------------|-------------------|----------------|
| | 4 | 0 | 1 | |

6. PREVENTIVE MEASURES

Personal Protective Equipment : Wear appropriate protective eyeglasses or chemical safety goggles.

Wear appropriate protective gloves to prevent skin exposure. Wear appropriate protective clothing to prevent skin exposure.

Handling : Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not allow contact with water. Use only in a chemical fume hood.

Storage : Store in a cool, dry place. Store in a tightly closed container. Keep under a nitrogen blanket.

Precautions : Keep out of reach of children (if sold to general public). Do not breathe dust

7. EMERGENCY / FIRST AID MEASURES

FIRE:

Fire Extinguishing Media : Use dry chemical, carbon dioxide or flooding quantities of water as spray on fire involved material.

Special Procedure : Approach fire from upwind to avoid hazardous vapors & toxic decomposition products. Use water spray to knock-down vapours. Cool all affected containers with flooding quantities of water. Do not use water on material itself.

Unusual Hazards : Reacts violently with water to form poisonous hydrogen fluoride

fumes. If confined and wet can cause explosion. May cause fire in contact with combustible material.

EXPOSURE: First Aid Measures:

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Antidotes / Dosages:

SPILLS :

Steps To Be Taken : Absorb spill with inert material, (e.g., dry sand or earth), then place into a chemical waste container. Wash area with soap and water. Provide ventilation.

Waste Disposal Method:

8. ADDITIONAL INFORMATION / REFERENCES

9. MANUFACTURERS / SUPPLIERS DATA

| | |
|--------------------------------|----------------------------------|
| NAME OF FIRM : | Contact person |
| MAILING ADDRESS : | in Emergency : |
| TELEPHONE / TELEX NOS : | Local Bodies involved : |
| TELEGRAPHIC ADDRESS : | Standard Packing : |
| OTHERS : | Trem Card Details / Ref : |

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