



# Nitrosyl hexafluoroantimonate: sc-257921

## MATERIAL SAFETY DATA SHEET

The Power to Question

### SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: Nitrosyl hexafluoroantimonate  
 Catalog Number: sc-257921  
 Supplier: Santa Cruz Biotechnology, Inc.  
 2145 Delaware Ave.  
 Santa Cruz, California 95060  
 800.457.3801 or 831.457.3800  
 Emergency: ChemWatch  
 Within the US & Canada: 877-715-9305  
 Outside the US & Canada: +800 2436 2255  
 (1-800-CHEMCALL) or call +613 9573 3112

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
Nitrosyl hexafluoroantimonate	16941-06-3	Yes

Formula: F<sub>6</sub>NOSb  
 Molecular Weight: 265.76

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Corrosive.  
 Causes burns. Harmful by inhalation and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### HMIS RATING

HEALTH: 3  
 FLAMMABILITY: 0  
 REACTIVITY: 1

#### NFPA RATING

HEALTH: 3  
 FLAMMABILITY: 0  
 REACTIVITY: 1

For additional information on toxicity, please refer to Section 11.

### SECTION 4 - FIRST AID MEASURES

#### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

#### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes.  
 Call a physician.

#### EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### SECTION 5 - FIRE FIGHTING MEASURES

#### FLASH POINT

N/A

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

#### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

### SECTION 7 - HANDLING AND STORAGE

#### HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing.  
 Avoid prolonged or repeated exposure.

#### STORAGE

Suitable: Keep tightly closed. Handle and store under argon.  
 Unsuitable: Do not store in glass  
 Incompatible Materials: Avoid contact with metals. Warning: Hydrolyzes to form hydrofluoric acid! Do not store in glass!

### SECTION 8 - EXPOSURE CONTROLS / PPE

#### ENGINEERING CONTROLS

Safety shower and eye bath. Use only in a chemical fume hood.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

Form ..... Solid chunks  
 pH ..... N/A  
 BP/BP Range ..... N/A  
 MP/MP Range ..... N/A  
 Freezing Point ..... N/A  
 Vapor Pressure ..... N/A  
 Vapor Density ..... N/A  
 Saturated Vapor Conc. .... N/A  
 Bulk Density ..... N/A  
 Odor Threshold ..... N/A  
 Volatile% ..... N/A

*continued...*

VOC Content . . . . . N/A  
Water Content . . . . . N/A  
Solvent Content . . . . . N/A  
Evaporation Rate . . . . . N/A  
Viscosity . . . . . N/A  
Surface Tension . . . . . N/A  
Partition Coefficient . . . . . N/A  
Decomposition Temp. . . . . N/A  
Flash Point . . . . . N/A  
Explosion Limits . . . . . N/A  
Flammability . . . . . N/A  
Autoignition Temp . . . . . N/A  
Refractive Index . . . . . N/A  
Optical Rotation . . . . . N/A  
Miscellaneous Data . . . . . N/A  
Solubility . . . . . N/A  
N/A = not available

### SECTION 10 - STABILITY AND REACTIVITY

#### STABILITY

Conditions of Instability: Warning: contact with acids, heat, or moisture may result in the formation of highly toxic and corrosive hydrofluoric acid Readily hydrolyzed.

Materials to Avoid: Avoid contact with metals., Strong oxidizing agents, Strong acids, Glass

#### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Nitrogen oxides, Hydrogen fluoride.

Hazardous Decomposition Products Formed Upon Contact with Water:

Warning: Hydrolyzes to form hydrofluoric acid! Do not store in glass!

#### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

### SECTION 11 - TOXICOLOGICAL INFORMATION

#### ROUTE OF EXPOSURE

Skin Contact: Causes burns.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes burns.

Inhalation: Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed.

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms may be delayed up to 24 hours depending upon the fluoride ion concentration. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets, or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia, and cardiac arrhythmias should be monitored for, since they can occur after exposure. Material reacts with moisture on the skin, eyes, and mucous membranes to generate hydrogen fluoride. Hydrogen fluoride is extremely destructive and may cause deep progressive burns that induce subcutaneous tissues to become blanched and bloodless resulting in lesions of dead tissue that are slow to heal. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

#### CONDITIONS AGGRAVATED BY EXPOSURE

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia. Prolonged exposure to fluoride dusts, vapors or mists results in perforation of the nasal septum. Chronic effects include excessive calcification of the bones, ligaments, and tendons.

### SECTION 12 - ECOLOGICAL INFORMATION

No data available.

### SECTION 13 - DISPOSAL CONSIDERATIONS

#### APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

### SECTION 14 - TRANSPORT INFORMATION

#### DOT

Proper Shipping Name: Corrosive solids, n.o.s.

UN#: 1759

Class: 8

Packing Group: Packing Group II

Hazard Label: Corrosive

PIH: Not PIH

#### IATA

Proper Shipping Name: Corrosive solid, n.o.s.

IATA UN Number: 1759

Hazard Class: 8

Packing Group: II

### SECTION 15 - REGULATORY INFORMATION

#### EU DIRECTIVES CLASSIFICATION

Symbol of Danger: Xn-N

Indication of Danger: Harmful. Dangerous for the environment.

R: 20/22-51/53

Risk Statements: Harmful by inhalation and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S: 61

Safety Statements: Avoid release to the environment. Refer to special instructions/safety data sheets.

#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Corrosive.

Risk Statements: Causes burns. Harmful by inhalation and if swallowed. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Avoid release to the environment. Refer to special instructions/safety data sheets.

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED: Yes

DEMINIMIS: 1,000 %

NOTES: This product is subject to SARA section 313 reporting requirements - antimony compounds.

#### CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No

NDSL: No

### SECTION 16 - OTHER INFORMATION

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

8/15/2012