

# Safety Data Sheet



## 1: Identification

### 1.1: Product Identifier

Product Name: SbI3

Product Number(s): 1SBI3-0013F

CAS Number: 7790-44-5

SDS Document Number: 000010

### 1.2: Recommended Uses and Restrictions

Recommended Uses

Manufacture of substances

Restrictions

Not for food or drug use.

### 1.3: Supplier Contact Information

APL Engineered Materials, Inc.

2401 N. Willow Rd.

Urbana, IL 61802

Phone: 217-367-1340

Fax: 217-367-9084

### 1.4: Emergency Phone Number

International: +01-813-248-0585

United States: 800-255-3924

## 2: Hazards Identification

### 2.1: Classifications

Acute Aquatic Toxicity - Category 2

Acute Toxicity, Inhalation - Category 4

Acute Toxicity, Oral - Category 4

Chronic Aquatic Toxicity - Category 2

Sensitization - Skin - Category 1

### 2.2: GHS Label Elements

Pictograms



Signal Word: Warning

Hazard Statements

H302: Harmful if swallowed.

- H317: May cause an allergic skin reaction.
- H332: Harmful if inhaled.
- H401: Toxic to aquatic life.
- H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements

- P261: Avoid breathing dust.
- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well-ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves clothing and glasses.
- P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P321: Specific treatment. Call a physician or poison control center. call doctor or poison control center
- P330: Rinse mouth.
- P333 + P313: If skin irritation or rash occurs: Get medical advice/attention.
- P363: Wash contaminated clothing before reuse.
- P391: Collect spillage.
- P501: Dispose of contents/container to licensed disposal facility.

2.3: Hazards Not Otherwise Classified or Not Covered by GHS

None.

2.4: Amount(s) of substances with unknown toxicity

None

**3: Composition/Information on Ingredients**

3.1: .Ingredient	.Weight%	.Formula	.CAS Number	.Mol Wt	.EC Number
SbI3	100	SbI3	7790-44-5	502.47	232-205-8

3.2: Other Hazardous components

none

3.3: Trade Secret Disclaimer

none

3.4: Synonyms

- Antimony (III) Iodide
- Antimony triiodide

**4: First Aid Measures**

4.1: First Aid

General

- Remove person from area of exposure and remove any contaminated clothing
- Consult with physician and provide this Safety Data Sheet

In contact with eyes

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.  
Seek medical attention if irritation develops or persists

In contact with skin

Wash thoroughly with soap and plenty of water. Remove all contaminated clothing for proper laundering. Seek medical attention if irritation develops or persists.

If swallowed

If conscious and alert, rinse mouth and drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get medical aid.

If inhaled

Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid.  
If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

#### 4.2: Most important symptoms and effects; acute and delayed

Stomach irregularities based on human evidence.

Harmful if inhaled

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

Harmful if swallowed.

May cause an allergic skin reaction.

#### 4.3: Indication of any immediate medical attention and special treatment needed

If you feel unwell, call a doctor/physician

### **5: Fire Fighting Measures**

#### 5.1: Fire extinguishing media

dry chemical

water or alcohol-resistant foam

carbon dioxide

#### 5.2: Specific hazards arising from the substance or mixture

antimony oxide

hydroiodic acid and hydroiodic acid fumes

#### 5.3: Special protective equipment and precautions for firefighters.

Wear self contained breathing apparatus for fire fighting if necessary

### **6: Accidental Release Measures**

#### 6.1: Personal precautions, protective equipment, and emergency procedures.

Avoid dust formation.

For personal protection see section 8.

Avoid breathing dust.

Evacuate personnel to safe areas.

Ensure adequate ventilation.

Use personal protective equipment.

#### 6.2: Methods and materials for containment and cleaning up.

Sweep up and shovel.

Keep in suitable, closed containers for disposal.

### 6.3: Environmental precautions

Do not let product enter drains.

### 6.4: Disposal

Dispose of in accordance with local regulations.

See section 13.

## 7: Handling and Storage

### 7.1: Precautions for safe handling

Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

See precautionary statements in section 2.2.

Avoid contact with skin and eyes.

### 7.2: Conditions for safe storage

Store away from moisture.

Store under inert gas.

Store in a dry and well-ventilated place.

Keep container tightly closed.

### 7.3: Incompatibilities

sodium oxides

sodium

acids

strong bases

moisture sensitive

## 8: Exposure Controls/Personal Protection

### 8.1: Control parameters

OSHA permissible exposure limit (PEL)

0.5 mg/m<sup>3</sup> (as Sb)

ACGIH threshold limit value (TLV)

0.5 mg/m<sup>3</sup> (as Sb)

NIOSH recommended exposure limit (REL)

0.5 mg/m<sup>3</sup> (as Sb)

### 8.2: Engineering controls

Use adequate ventilation to keep airborne concentrations low

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower

### 8.3: Personal protective equipment

Eyes

Use adequate ventilation to keep airborne concentrations low

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

#### Skin

Wear appropriate, chemical-resistant protective gloves to prevent skin exposure.

#### Clothing

Wear appropriate protective clothing to prevent skin exposure

#### Respirator

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.  
Always use a NIOSH or European Standard EN 149 approved respirator when necessary

## 9: Physical and Chemical Properties

### 9.a: Appearance

State: Solid

Form: powder or spheres

Color: no data available

9.b: Odor: no data available

9.c: Odor threshold: no data available

9.d: pH: no data available

9.e: Melting point / freezing point: 170 °C (338 °F)

9.f: Initial boiling point and range: 401 °C (754 °F)

9.g: Flashpoint: no data available

9.h: Evaporation rate: no data available

9.i: Flammability (solid, gas): no data available

9.j: Upper/lower flammability or explosive limits: no data available

9.k: Vapor pressure: no data available

9.l: Vapor density: no data available

9.m: Relative density: 4.92 g/cm<sup>3</sup> at 25 °C (77 °F)

9.n: Water Solubility: no data available

9.o: Partition coefficient: n-octanol/water: no data available

9.p: Auto-ignition temperature: no data available

9.q: Decomposition temperature: no data available

9.r: Viscosity: no data available

## 10: Stability and Reactivity

### 10.1: Reactivity

no data available

### 10.2: Chemical stability

Stable under recommended storage conditions.

### 10.3: Possibility of hazardous reactions

no data available

#### 10.4: Conditions to avoid

exposure to water

In the event of fire: see section 5

#### 10.5: Incompatible materials

See section 7.3.

#### 10.6: Hazardous decomposition products

In the event of fire: see section 5.2

Other decomposition products - no data available

## 11: Toxicological Information

### 11.1: Toxicity data

Acute toxicity - Oral

no data available

Acute toxicity - Dermal

no data available

Acute toxicity - Inhalation

No data available.

Skin corrosion/irritation

no data available

Eye damage/irritation

No data available.

Respiratory irritation

No data available.

Germ cell mutagenicity

no data available

Reproductive toxicity

no data available

Specific organ toxicity - single exposure

No data available.

Specific organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

No data available.

ACGIH carcinogenicity

The ACGIH has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

IARC carcinogenicity

The IARC has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

NTP carcinogenicity

The NTP has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

#### OSHA carcinogenicity

OSHA has not identified any component of this product present at levels greater than or equal to 0.1% as a probable, possible or confirmed human carcinogen.

### 11.2: Routes of exposure

See section 2.2

oral  
eyes  
skin

### 11.3: Symptoms of exposure

See section 4.2

### 11.4: Delayed and immediate effects of exposure

To the best of our knowledge the toxicological properties have not been thoroughly investigated.

Prolonged exposure to iodides may produce iodism in sensitive individuals. Symptoms of exposure include skin rash, running nose, headache and irritation of the mucous membrane. For severe cases the skin may show pimples, boils, hives, blisters and black and blue spots. Iodides are readily diffused across the placenta. Neonatal deaths from respiratory distress secondary to goiter have been reported. Iodides have been known to cause drug-induced fevers, which are usually of short duration.

## 12: Ecological Information

### 12.1: Ecotoxicity

Toxicity to fish

No data available

Toxicity to daphnia and other aquatic invertebrates

No data available

Toxicity to algae/bacteria

No data available

### 12.2: Persistence and degradability

no data available

### 12.3: Bioaccumulative potential

no data available

### 12.4: Mobility in soil

no data available

### 12.5: Other effects

Very toxic to aquatic life with long lasting effects.

## 13: Disposal Considerations

### 13.1: Waste treatment methods

No data available

### 13.2: Safe handling

See section 7.1 .

### 13.3: Product disposal

Contact a licensed professional waste disposal service to dispose of this material.

### 13.4: Packaging disposal

Dispose of as unused product.

## 14: Transport Information

### 14.1: DOT(US)

UN Number: 3260

Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Antimony(III) iodide)

Packing Group: II

Shipping Class(es): 8

Marine Pollutant: No

### 14.2: IMDG

UN Number: 3260

Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Antimony(III) iodide)

Packing Group: II

Shipping Class(es): 8

Marine Pollutant: Yes

### 14.3: IATA

UN Number: 3260

Proper Shipping Name: Corrosive solid, acidic, inorganic, n.o.s. (Antimony(III) iodide)

Packing Group: II

Shipping Class(es): 8

### 14.4: Special Shipping Precautions

None

## 15: Regulatory Information

### 15.1: TSCA inventory

This material is listed on the TSCA inventory.

### 15.2: SARA 302 components

This material is not subject to the reporting requirements of SARA Title III, Section 302.

### 15.3: SARA 313 components

This material is subject to the reporting requirements of SARA Title III, Section 313.

### 15.4: SARA 313/312 hazards

Chronic health hazard.

Acute health hazard.

### 15.5: Other information

Pennsylvania Right To Know Components -This product does not contain materials listed on the Pennsylvania Right to Know list

New Jersey Right To Know Components -This product contains materials listed on the New Jersey Right to Know list



Massachusetts Right To Know Components - This product does not contain materials listed on the Massachusetts Right to Know list

California Prop. 65 Components - This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## 16: Additional Information

### 16.1: NFPA

Health: 2

Fire: 0

Reactivity: 0

Special:

### 16.2: HMIS

Health: 2

Chronic: \*

Flammability: 0

Physical Hazard: 0

### 16.3: Disclaimers

For industrial use only. Not for drug, household or other uses

The information herein is believed to be accurate and reliable as of the date compiled. However, APL Engineered Materials, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information on this data sheet or any use of the product based upon this information.

### 16.4: References

Information contained on this SDS sheet was obtained from some or all of the following sources: American Conference of Governmental Industrial Hygienists (ACGIH), TLVs and BEIs; National Institute for Occupational Safety and Health (NIOSH), Pocket Guide to Chemical Hazards; European Chemicals Agency, <http://echa.europa.eu/>; The National Institute of Health, U.S National Library of Medicine, TOXNET, Toxicology Data Network; and the Registry of Toxic Effects of Chemical Substances (RTECS) database.

### 16.5: Version

Preparation Date: 5/22/2015

Revision Date: 5/22/2015

Version Number: GHS 1.0