# SPECTRASCAN®

#### MATERIAL SAFETY DATA SHEET

according to EC Directive 2001/58/EC

SS-1153; SS-1253; SS-1553

Revision Number 1, Revision Date April 25, 2007

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product code SS-153 SB

**Product name** 1000 ug/mL Antimony

Common Name Antimony in Dilute Nitric Acid / Tartaric Acid

Manufacturer, importer, supplier Teknolab

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Emergency telephone number 800-424-9300 CHEMTREC (24 hrs)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% Weight	ACGIH*	OSHA*
7732-18-5	Water	~90-95	N/A	N/A
7697-37-2	Nitric Acid	~0-2	2 ppm TWA	2 ppm TWA; 5 mg/m3 TWA
87-69-4	Tartaric acid (d, I)	~2-5	N/A	N/A
7440-36-0	Antimony	~0.1-1	0.5 mg/m3 TWA	0.5 mg/m3 TWA

<sup>\*</sup> ACGIH - Occupational Exposure Limits - TWAs

#### 3. HAZARDS IDENTIFICATION

#### **Emergency Overview**

- Vapours may be irritating to eyes, nose, throat, and lungs
- Corrosive

Eye contact	Contact with eyes may cause irritation	
Skin contact	Substance may cause slight skin irritation	
Inhalation	May cause irritation of respiratory tract	
Ingestion	Harmful if swallowed	

#### 4. FIRST AID MEASURES

General advice	Show this safety data sheet to the doctor in attendance
Skin contact	Wash off immediately with soap and plenty of water removing all
	contaminated clothes and shoes
	Consult a physician if necessary
Eye contact	<ul> <li>Immediately flush with plenty of water. After initial flushing, remove any</li> </ul>
	contact lenses and continue flushing for at least 15 minutes
	Keep eye wide open while rinsing
	<ul> <li>If eye irritation persists, consult a specialist</li> </ul>
Inhalation	Move to fresh air in case of accidental inhalation of vapours
	If breathing is difficult, give oxygen
	Consult a physician if necessary
Ingestion	Call a physician or Poison Control Centre immediately
	<ul> <li>If swallowed, seek medical advice immediately and show this container or label</li> </ul>
	If conscious, drink plenty of water

#### 5. FIRE-FIGHTING MEASURES

<sup>\*</sup> OSHA - Final PELs - Time Weighted Averages (TWAs)

Flash point	NA
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Specific hazards	<ul> <li>Thermal decomposition can lead to release of irritating gases and vapours</li> </ul>
Specific methods	<ul> <li>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations</li> </ul>
Special protective equipment for firefighters	<ul> <li>As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear</li> </ul>
NFPA (National Fire Protection Association)	<ul> <li>Health - 2</li> <li>Fire Hazard - 0</li> <li>Reactivity - 0</li> </ul>
Under conditions giving incomplete combustion, hazardous gases produced may consist of:	nitrogen oxides (NOx).

6. ACCIDENTAL RELEASE MEASURES				
Personal precautions	<ul> <li>Evacuate personnel to safe areas</li> <li>Keep people away from and upwind of spill/leak</li> <li>Wear personal protective equipment</li> </ul>			
Environmental precautions	<ul> <li>Ensure adequate ventilation</li> <li>Prevent further leakage or spillage if safe to do so</li> <li>Prevent product from entering drains</li> </ul>			
Methods for cleaning up	<ul> <li>Dam up</li> <li>Neutralize with lime milk or soda and flush with plenty of water</li> <li>Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container</li> </ul>			
	After cleaning, flush away traces with water			

# 7. HANDLING AND STORAGE

# **Handling**

Technical measures/Precautions	Use only in area provided with appropriate exhaust ventilation
Safe handling advice	Wear personal protective equipment

# **Storage**

Technical   ■ Keep in properly labelled containers				
measures/Precautions	Store at room temperature in the original container			
	<ul> <li>Keep containers tightly closed in a dry, cool and well-ventilated place</li> </ul>			
Incompatible products	organic materials			
	reducing agents			

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment				
Hand protection   ● impervious gloves				
Eye protection	tightly fitting safety goggles			
Respiratory protection • Ensure adequate ventilation				
Skin and body protection	Chemical resistant apron			
	Lab coat			
Hygiene measures	When using, do not eat, drink or smoke			
	Regular cleaning of equipment, work area and clothing			

# 9. PHYSICAL AND CHEMICAL PROPERTIES

### **General Information**

Form liquid.
Appearance clear
Colour None.
Odour None.

### **Important Health Safety and Environmental Information**

pH 0 to 2
Boiling point/range 100°C
Flash point N/A
Vapour pressure NA.
Water solubility miscible.

10. STABILITY AND REACTIVITY						
Stability	Stable under normal conditions					
	Hazardous polymerisation does not occur					
Materials to avoid	organic materials					
reducing agents						
Hazardous decomposition products	nitrogen oxides (NOx)					

#### 11. TOXICOLOGICAL INFORMATION

#### **Acute toxicity**

#### **Component Information**

CAS	Chemical Name	% Weight	LD50/oral/rat =	LD50/dermal/rat =
7732-18-5	Water	~90-95	N/A	N/A
7697-37-2	Nitric Acid	~0-2	Inhalation LC50 Rat: 130 mg/kg/4H	Inhalation LC50 Rat: 130 mg/kg/4H
87-69-4	Tartaric acid (d, I)	~2-5	N/A	N/A
7440-36-0	Antimony	~0.1-1	Oral LD50 Rat: 7 g/kg	Oral LD50 Rat: 7 g/kg

#### **Product Information**

Local effects	Poison			
Skin irritation	May cause skin irritation and/or dermatitis.			
Eye irritation	May cause eye irritation with susceptible persons.			
nhalation May cause irritation of respiratory tract.				
Ingestion If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach.				
Chronic toxicity Avoid repeated exposure.				
carcinogenic effects Questionable carcinogen.				

#### 12. ECOLOGICAL INFORMATION

### **Ecotoxicity effects**

#### **Component Information**

CAS	Chemical Name	% Weight	EFAD*	EFFSD*	EMD - Ecotoxicity*
7732-18-5	Water	~90-95	N/A	N/A	N/A
7697-37-2	Nitric Acid	~0-2	N/A	N/A	N/A
87-69-4	Tartaric acid (d, I)	~2-5	N/A	N/A	N/A
7440-36-0	Antimony	~0.1-1	N/A	N/A	N/A

<sup>\*</sup> EFAD - Ecotoxicity - Freshwater Algae Data

<sup>\*</sup> EFFSD - Ecotoxicity - Freshwater Fish Species Data

<sup>\*</sup> EMD - Ecotoxicity - Microtox Data

#### **Product Information**

Do not allow material to contaminate ground water or sewage system

#### Other information

13. DISPOSAL CONSIDERATIONS						
Waste from residues / unused products	In accordance with local and national regulations					
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal					

#### 14. TRANSPORT INFORMATION

DOT

UN-No UN3264 / Class 8

**Proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s

Packing group III

IATA-DGR

UN-No UN3264 / Class 8

**Proper shipping name** Corrosive liquid, acidic, inorganic, n.o.s

Packing group III

#### 15. REGULATORY INFORMATION

#### U.S. INVENTORIES:

CAS	Chemical Name	% Weight	CPCL*	NJRTK*	CERCLA/SARA*
7732-18-5	Water	~90-95	N/A	N/A	N/A
7697-37-2	Nitric Acid	~0-2	N/A	sn 1356	1000 lb final RQ; 454 kg final RQ
87-69-4	Tartaric acid (d, I)	~2-5	N/A	N/A	N/A
7440-36-0	Antimony	~0.1-1	N/A	sn 0141	5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is equal to or exceeds 0.004 inches); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of solid metal released is equal to or exceeds 0.004 inches)

<sup>\*</sup> CPCL - California - Proposition 65 - Carcinogens List

#### **INTERNATIONAL INVENTORIES**:

INTERNATIONAL INVENTORIES.							
CAS	Chemical Name	% Weight	WHMIS*	EINECCS - European Union*			
7732-18-5	Water	~90-95	Uncontrolled product according to WHMIS classification criteria	231-791-2			
7697-37-2	Nitric Acid	~0-2	C, E (including 60%, 61.3%, 63%, 67%, 67.18%, 70%, 90%); E (10%)	231-714-2			
87-69-4	Tartaric acid (d, I)	~2-5	E	201-766-0			
7440-36-0	Antimony	~0.1-1	Uncontrolled product according to WHMIS classification criteria	231-146-5			

<sup>\*</sup> WHMIS - Canada - WHMIS - Classifications of Substances

<sup>\*</sup> NJRTK - New Jersey - Department of Health RTK List

<sup>\*</sup> CERCLA/SARA - Hazardous Substances and their Reportable Quantities

\* EINECCS - European Union - European inventory of Existing Commercial Chemical Substances (EINECCS)

#### **16. OTHER INFORMATION**

The above information is believed to be accurate and represents the best information available to us. It has been compiled from the data presented in various technical publications and our experience and should only be used as a guide for handling this product. It is the user's responsibility to determine the suitability of this information for their particular purposes. We assume that only qualified individuals, trained and familiar with procedures suitable to this product will handle this material. Teknolab assumes no responsibility and shall not be held liable for any damage resulting from misuse of this product.