

Revision Date: 12-10-2014

# SAFETY DATA SHEET

# 1. Identification

Product identifier: ANTIMONY TRIOXIDE

Other means of identification **Product No.:** 0887, 0886

Recommended use and restriction on use

Recommended use: Not available. Restrictions on use: Not known.

## Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name: Avantor Performance Materials, Inc. Address: 3477 Corporate Parkway, Suite 200

Center Valley, PA 18034

Telephone:

Customer Service: 855-282-6867

Fax:

Contact Person: Environmental Health & Safety e-mail: info@avantormaterials.com

**Emergency telephone number:** 

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

# 2. Hazard(s) identification

## **Hazard Classification**

**Health Hazards** 

Carcinogenicity Category 2

**Environmental Hazards** 

Acute hazards to the aquatic Category 3

environment

**Label Elements** 

**Hazard Symbol:** 



Signal Word: Warning

**Hazard Statement:** Suspected of causing cancer.

Harmful to aquatic life.

Precautionary Statement

**Prevention:** Obtain special instructions before use. Do not handle until all safety

precautions have been read and understood. Wear protective



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gloves/protective clothing/eye protection/face protection. Avoid release to

the environment.

**Response:** If exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not result in GHS classification:

None.

# 3. Composition/information on ingredients

#### **Substances**

Chemical Identity	Common name and synonyms		Content in percent (%)*		
ANTIMONY TRIOXIDE		1309-64-4	99 - 100%		

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First-aid measures

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet

to the doctor in attendance.

**Ingestion:** Rinse mouth. Call a POISON CENTER or doctor/physician if you feel

unwell.

**Inhalation:** Move to fresh air. Get medical attention if symptoms persist.

**Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation

persists after washing. Wash contaminated clothing before reuse.

**Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.

Most important symptoms/effects, acute and delayed

**Symptoms:** May cause irritation to skin, eyes, and respiratory tract.

Indication of immediate medical attention and special treatment needed

**Treat symptomatically.** Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** In case of fire and/or explosion do not breathe fumes.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

None known.



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Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

## Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to

flames with water until well after the fire is out.

Special protective equipment

for fire-fighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in

enclosed spaces, SCBA.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the MSDS

for Personal Protective Equipment.

Methods and material for containment and cleaning

up:

Sweep up and place in a clearly labeled container for chemical waste.

Clean surface thoroughly to remove residual contamination.

Notification Procedures: Prevent entry into waterways, sewer, basements or confined areas. Inform

authorities if large amounts are involved.

**Environmental Precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe

to do so.

# 7. Handling and storage

**Precautions for safe handling:** Do not handle until all safety precautions have been read and understood.

Obtain special instructions before use. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Use personal protective equipment as

required. Wash hands thoroughly after handling.

Conditions for safe storage,

including any incompatibilities:

Keep container tightly closed. Store in a cool, dry place. Store in a well-

ventilated place.

# 8. Exposure controls/personal protection

#### **Control Parameters**

## **Occupational Exposure Limits**

Chemical Identity	Туре	Exposure Limit Values	Source
ANTIMONY TRIOXIDE - as Sb	TWA	0.5 mg/m3	US. ACGIH Threshold Limit Values (2011)
	REL	0.5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	0.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	0.5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls

No data available.



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#### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used.

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the

immediate work area.

**Eye/face protection:** Use tight fitting goggles if dust is generated.

**Skin Protection** 

**Hand Protection:** Wear protective gloves.

Other: Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Always observe good personal hygiene measures, such as washing after

handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Provide eyewash station and safety

shower.

# 9. Physical and chemical properties

**Appearance** 

Physical state: Solid

Form: Crystals or powder.

Color: White
Odor: Odorless

Odor threshold: No data available. PH: No data available.

Melting point/freezing point: 655 °C Initial boiling point and boiling range: 1,425 °C

Flash Point:

Evaporation rate:

No data available.

No data available.

No data available.

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

Solubility(ies)

**Solubility in water:** (25 °C) Insoluble in water

(100 °C) Slightly Soluble

Solubility (other):

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

No data available.

No data available.

No data available.



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Other information

Molecular weight: 291.52 g/mol (O3Sb2)

# 10. Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

**Possibility of Hazardous** 

Reactions:

Hazardous polymerization does not occur.

**Conditions to Avoid:** Contact with incompatible materials. Avoid dust formation.

**Incompatible Materials:** Strong acids. Strong bases. Reducing agents.

**Hazardous Decomposition** 

**Products:** 

Toxic metal fumes may form when heated to decomposition.

# 11. Toxicological information

# Information on likely routes of exposure

**Ingestion:** May cause irritation of the gastrointestinal tract.

**Inhalation:** May cause irritation to the respiratory system.

**Skin Contact:** May cause irritation.

**Eye contact:** May cause temporary eye irritation.

### Information on toxicological effects

## Acute toxicity (list all possible routes of exposure)

Oral

**Product:** LD 50 (Rat): > 34,600 mg/kg

LD 50 (Rat): > 20,000 mg/kg

**Dermal** 

Product: LDLo (Rabbit): 2,000 mg/kg

Inhalation

**Product:** No data available.

**Repeated Dose Toxicity** 

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** May cause skin irritation.

Serious Eye Damage/Eye Irritation

**Product:** May irritate eyes.

Respiratory or Skin Sensitization

**Product:** Not a skin sensitizer.

Carcinogenicity

**Product:** May cause cancer.



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#### IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

ANTIMONY TRIOXIDE

Overall evaluation: 2B. Possibly carcinogenic to humans.

# **US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

**Germ Cell Mutagenicity** 

In vitro

**Product:** No mutagenic components identified

In vivo

**Product:** No mutagenic components identified

**Reproductive Toxicity** 

**Product:** No components toxic to reproduction

Specific Target Organ Toxicity - Single Exposure
Product:

No data available.

110 data available

Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

**Aspiration Hazard** 

Product: Not classified

Other Effects: None known.

## 12. Ecological information

#### **Ecotoxicity:**

# Acute hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

Specified substance(s):

ANTIMONY TRIOXIDE LC 50 (Bluegill (Lepomis macrochirus), 96 h): > 530 mg/l Mortality

LC 50 (Fathead minnow (Pimephales promelas), 96 h): > 833 mg/l Mortality

**Aquatic Invertebrates** 

**Product:** No data available.

Specified substance(s):

ANTIMONY TRIOXIDE EC 50 (Water flea (Daphnia magna), 48 h): 361.5 - 496 mg/l Intoxication

#### Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

**Aquatic Invertebrates** 

**Product:** No data available.

**Toxicity to Aquatic Plants** 



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**Product:** No data available.

Persistence and Degradability

Biodegradation

**Product:** There are no data on the degradability of this product.

**BOD/COD Ratio** 

**Product:** No data available.

**Bioaccumulative Potential** 

**Bioconcentration Factor (BCF)** 

**Product:** No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in Soil: No data available.

Other Adverse Effects: Harmful to aquatic organisms.

13. Disposal considerations

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings even

after container is emptied.

14. Transport information

DOT

UN Number: UN 1549

UN Proper Shipping Name: Antimony compounds, inorganic, solid, n.o.s.(Antimony Trioxide)

Transport Hazard Class(es)

Class(es): 6.1
Label(s): 6.1
Packing Group: III
Marine Pollutant: No

**IMDG** 

UN Number: UN 1549

UN Proper Shipping Name: ANTIMONY COMPOUND, INORGANIC, SOLID, N.O.S. (Antimony

Trioxide)

Transport Hazard Class(es)

 Class(es):
 6.1

 Label(s):
 6.1

 EmS No.:
 F-A, S-A

Packing Group: III
Marine Pollutant: No



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**IATA** 

UN Number: UN 1549

Proper Shipping Name: Antimony compound, inorganic, solid, n.o.s.(Antimony Trioxide)

Transport Hazard Class(es):

Class(es): 6.1
Label(s): 6.1
Marine Pollutant: No
Packing Group: III

# 15. Regulatory information

#### **US Federal Regulations**

# TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

ANTIMONY TRIOXIDE Reportable quantity: 1000 lbs.

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

### **Hazard categories**

Χ	Acute (Immediate)	Х	Chronic (Delayed)	Fire	Reactive	Pressure Generating
,,	riodio (illililiodialo)	/\	ornorno (Bolayou)		rtoactivo	i roodaro Contorating

## **SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

## **SARA 304 Emergency Release Notification**

Chemical Identity	RQ
ANTIMONY TRIOXIDE	1000 lbs.

# SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
ANTIMONY TRIOXIDE	500 lbs

# **SARA 313 (TRI Reporting)**

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing	
ANTIMONY TRIOXIDE	10000 lbs	25000 lbs.	

# Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

ANTIMONY TRIOXIDE Reportable quantity: 1000 lbs.

# Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

#### **US State Regulations**

#### US. California Proposition 65

ANTIMONY TRIOXIDE Carcinogenic.

# **US. New Jersey Worker and Community Right-to-Know Act**

ANTIMONY TRIOXIDE Listed

#### **US. Massachusetts RTK - Substance List**

ANTIMONY TRIOXIDE Listed



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## **US. Pennsylvania RTK - Hazardous Substances**

ANTIMONY TRIOXIDE Listed

**US. Rhode Island RTK** 

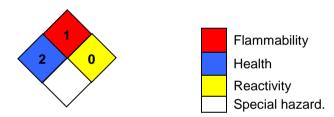
ANTIMONY TRIOXIDE Listed

# **Inventory Status:**

Australia AICS: On or in compliance with the inventory Canada DSL Inventory List: On or in compliance with the inventory On or in compliance with the inventory EINECS, ELINCS or NLP: Japan (ENCS) List: On or in compliance with the inventory China Inv. Existing Chemical Substances: On or in compliance with the inventory Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory Canada NDSL Inventory: Not in compliance with the inventory. Philippines PICCS: On or in compliance with the inventory US TSCA Inventory: On or in compliance with the inventory New Zealand Inventory of Chemicals: On or in compliance with the inventory Japan ISHL Listing: On or in compliance with the inventory Japan Pharmacopoeia Listing: On or in compliance with the inventory

# 16.Other information, including date of preparation or last revision

#### **NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Issue Date:** 12-10-2014

**Revision Date:** No data available.

Version #: 1.0

Further Information: No data available.



Revision Rev

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Version: 1.0

### Disclaimer:

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