

**TRIS(DIMETHYLAMINO)ANTIMONY**

Safety Data Sheet OMAN080

Date of issue: 03/04/2015

Version: 1.0

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form	: Substance
Physical state	: Liquid
Substance name	: TRIS(DIMETHYLAMINO)ANTIMONY
Product code	: OMAN080
Formula	: C <sub>6</sub> H <sub>18</sub> N <sub>3</sub> Sb
Synonyms	: AMTIMONYTRIS(DIMETHYLAMIDE)
Chemical family	: ORGANOANTIMONY

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance/mixture	: Chemical intermediate For research use only
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**1.3. Details of the supplier of the safety data sheet****GELEST, INC.**11 East Steel Road  
Morrisville, PA 19067**USA**

T 215-547-1015 - F 215-547-2484 - (M-F): 8:00 AM - 5:30 PM EST

[info@gelest.com](mailto:info@gelest.com) - [www.gelest.com](http://www.gelest.com)**1.4. Emergency telephone number**

Emergency number	: CHEMTREC: 1-800-424-9300 (USA); +1 703-527-3887 (International)
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**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (GHS-US)**

Flam. Liq. 3 H226

Skin Irrit. 2 H315

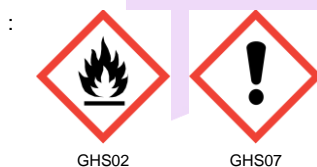
Eye Irrit. 2A H319

STOT SE 3 H335

Full text of H-phrases: see section 16

**2.2. Label elements****GHS-US labeling**

Hazard pictograms (GHS-US)



GHS02

GHS07

Signal word (GHS-US)

: Warning

Hazard statements (GHS-US)

: H226 - Flammable liquid and vapor  
 H315 - Causes skin irritation  
 H319 - Causes serious eye irritation  
 H335 - May cause respiratory irritation

Precautionary statements (GHS-US)

: P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P210 - Keep away from heat, open flames, sparks. - No smoking  
 P240 - Ground/bond container and receiving equipment  
 P241 - Use explosion-proof electrical equipment  
 P242 - Use only non-sparking tools  
 P243 - Take precautionary measures against static discharge  
 P261 - Avoid breathing vapors  
 P264 - Wash hands thoroughly after handling  
 P271 - Use only outdoors or in a well-ventilated area  
 P303+P361+P353 - If on skin (or hair): take off immediately all contaminated clothing. rinse skin with water/shower  
 P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
 P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P312 - Call a doctor if you feel unwell  
 P332+P313 - If skin irritation occurs: Get medical advice/attention

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P337+P313 - If eye irritation persists: Get medical advice/attention  
P362 - Take off contaminated clothing and wash before reuse  
P370+P378 - In case of fire: Use water spray, foam, carbon dioxide, dry chemical to extinguish  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed  
P403+P235 - Keep in a cool place  
P405 - Store locked up  
P501 - Dispose of contents/container to licensed waste disposal facility.

### 2.3. Other hazards

No additional information available

### 2.4. Unknown acute toxicity (GHS-US)

No data available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Substance type : Mono-constituent  
Name : TRIS(DIMETHYLAMINO)ANTIMONY  
CAS No : 7289-92-1

Name	Product identifier	%	Classification (GHS-US)
Tris(dimethylamino)antimony	(CAS No) 7289-92-1	> 95	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Remove contaminated clothing and shoes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). If possible show this sheet; if not available show packaging or label.

First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Wash with plenty of soap and water. Get medical advice/attention.

First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Get medical advice/attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation. Overexposure may cause: Coughing. Headache. Nausea.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation.

Symptoms/injuries after ingestion : May be harmful if swallowed.

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

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Foam. Carbon dioxide. Dry chemical.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor. Irritating fumes of dimethylamine and organic acid vapors may develop when material is exposed to water or open flame.

### 5.3. Advice for firefighters

Firefighting instructions : Use water spray to cool exposed surfaces. Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Avoid all eye and skin contact and do not breathe vapor and mist.

## SECTION 6: Accidental release measures

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

General measures : Remove ignition sources. Use special care to avoid static electric charges.

#### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

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### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal. Use only non-sparking tools.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid all eye and skin contact and do not breathe vapor and mist. Provide good ventilation in process area to prevent accumulation of vapors. Ground/bond container and receiving equipment. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

Incompatible materials : Acids. Alcohols. Moisture. Oxidizing agent. Water.

Storage area : Store in a well-ventilated place. Store away from heat.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Tris(dimethylamino)antimony (7289-92-1)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	500 mg/m <sup>3</sup> (Sb <sub>2</sub> O <sub>3</sub> )
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm Dimethylamine

### 8.2. Exposure controls

Appropriate engineering controls : Provide local exhaust or general room ventilation.

Personal protective equipment : Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection : Neoprene or nitrile rubber gloves.

Eye protection : Chemical goggles. Contact lenses should not be worn.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : NIOSH-certified combination organic vapor - amine gas (brown cartridge) respirator.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Molecular mass : 253.98 g/mol

Color : Straw.

Odor : Acrid. Amine.

Odor threshold : No data available

Refractive index : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : < 0 °C

Boiling point : 50 - 52 °C @ 0.5 mm Hg

Flash point : < 60 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : Flammable liquid and vapor

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Vapor pressure	: < 0.2 mm Hg @ 20°C
Relative vapor density at 20 °C	: > 1
Relative density	: 1.325
Solubility	: Reacts with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable in sealed containers stored under a dry inert atmosphere.

### 10.3. Possibility of hazardous reactions

Reacts with water and moisture in air, liberating dimethylamine.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

### 10.5. Incompatible materials

Acids. Alcohols. Moisture. Oxidizing agent. Water.

### 10.6. Hazardous decomposition products

Dimethylamine. Hydrogen. Organic acid vapors.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: May cause respiratory irritation. Overexposure may cause: Coughing. Headache. Nausea.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: May be harmful if swallowed.
Reason for classification	: Expert judgment

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

No additional information available

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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other adverse effects : This substance may be hazardous to the environment.  
Effect on ozone layer : No additional information available  
Effect on the global warming : No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to licensed waste disposal facility.  
Ecology - waste materials : Avoid release to the environment.

## SECTION 14: Transport information

### 14.1. UN number

UN-No.(DOT) : 1993  
DOT NA no. : UN1993

### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, n.o.s.  
(TRIS(DIMETHYLAMINO)ANTIMONY)  
Hazard Classes (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120  
Hazard labels (DOT) : 3 - Flammable liquid



DOT Symbols : G - Identifies PSN requiring a technical name  
Packing group (DOT) : III - Minor Danger  
DOT Packaging Exceptions (49 CFR 173.xxx) : 150  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203  
DOT Packaging Bulk (49 CFR 173.xxx) : 242

### 14.3. Additional information

Other information : No supplementary information available.

### Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

### Air transport

DOT Quantity Limitations Passenger aircraft/rail : 60 L  
(49 CFR 173.27)  
DOT Quantity Limitations Cargo aircraft only (49 : 220 L  
CFR 175.75)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

#### TRIS(DIMETHYLAMINO)ANTIMONY (7289-92-1)

TSCA Exemption/Exclusion	CAUTION: This material is supplied for research and development purposes subject to the R&D exemption under TSCA, 40 CFR 720.36, and must meet the requirements of the exemption, including supervision by a "technically qualified individual" as defined by 40 CFR 720.3(ee). The use of this material for "commercial purposes" as defined by 40 CFR 720.3(r) is not permitted in the United States.
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#### Tris(dimethylamino)antimony (7289-92-1)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

### 15.2. International regulations

No additional information available

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### 15.3. US State regulations

#### TRIS(DIMETHYLAMINO)ANTIMONY(7289-92-1)

U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

#### Tris(dimethylamino)antimony (7289-92-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
No	No	No	No	

## SECTION 16: Other information

### Abbreviations and acronyms

: Abbreviations: ND: Not Determined, No Data; NA: Not Applicable; LD: Lethal Dose; LC: Lethal Concentration; ATE: Acute Toxicity Estimates; H: hour; °: °C unless otherwise stated; mm: millimeters Hg, torr; PEL: permissible exposure level; TWA: time weighted average; TLV: threshold limit value; TG: Test Guideline; NIOSH: National Institute for Occupational Safety and Health; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; HMIS: Hazardous Material Information System; CAS No.: Chemical Abstract Service Registration Number; EC No.: European Commission Registration Number; EC Index No.: European Commission Index Number; OECD: The Organisation for Economic Co-operation and Development.

### Full text of H-phrases::

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

### HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given  
Flammability : 3 Serious Hazard  
Physical : 1 Slight Hazard

Prepared by safety and environmental affairs.

Date of issue: 03/04/2015 Version: 1.0

SDS US (GHS HazCom 2012) - Custom

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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