# **Sodium Stibogluconate**

# sc-202815

**Material Safety Data Sheet** 



The Power to Question

Hazard Alert Code Key:

EXTREME

HIGH

MODERATE

LOW

# Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **PRODUCT NAME**

Sodium Stibogluconate

# STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.



# **SUPPLIER**

Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, California 95060 800.457.3801 or 831.457.3800 EMERGENCY

#### Ola a real Madada

ChemWatch

Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

# **SYNONYMS**

C12-H17-O17-Sb2.3Na.9H2O, "D-gluconic acid, 2, 42', 4'-O-(oxydistilbylidyne)bis-, Sb, Sb'-dioxide, ", "trisodium salt nonahydrate", "estibogluconato sodico", "D-gluconic acid, cyclic ester with antimonic acid, trisodium salt 9H2O", "gfluconic acid sodium deriavtive", "antimony gluconate complex sodium salt", "sodium stibogluconate", "pentavalent antimony compound", "pentavalent antimonyl gluconate", Myostibin, Pentostam, Solustibosan, Solustin, Solusurmin, Solyusurmin, Stibanate, Stibanose, Stibatin, Stibinol, "trivalent antimony compound", C6-H8-Na-O7-Sb, "trivalent antimonyl gluconate", Tristam, T.S.A.G., "anthelmintic (schistosoma)", "Leishmanicide schistosomicide"

### **Section 2 - HAZARDS IDENTIFICATION**

# **CHEMWATCH HAZARD RATINGS**

OTTE MINITER OF THE				
		Min	Max	
Flammability	1			
Toxicity	2			11
Body Contact	2		Min/Nil=0 Low=1	<b>Y</b>
Reactivity	1		Moderate=2	
Chronic	2		High=3 Extreme=4	

### **CANADIAN WHMIS SYMBOLS**





# **EMERGENCY OVERVIEW**

#### RISK

Harmful by inhalation and if swallowed.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### POTENTIAL HEALTH EFFECTS

#### **ACUTE HEALTH EFFECTS**

#### **SWALLOWED**

- Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
- Antimony poisoning causes similar symptoms to arsenic poisoning although vomiting is more prominent.

There may be changes in the rhythm of the heart beat.

#### EYE

■ Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may cause transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Slight abrasive damage may also result.

#### SKIN

- There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.
- Skin contact with antimony compounds may result in redness and severe irritation with the formation of itchy papules, pustules, skin lesions/ small septic blisters (antimony spots) within a few hours.

Rhinitis may also result from dermal contact.

- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

#### INHALED

- Inhalation of dusts, generated by the material, during the course of normalhandling, may be harmful.
- There is some evidence to suggest that the material can cause respiratory irritation in some persons.

The body's response to such irritation can cause further lung damage.

■ Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures.

■ Inhalation of antimony can cause breathing difficulties and gastrointestinal upset including sore throat, shallow breathing, dizziness, weight loss, gum bleeds and anaemia.

Lung swelling and congestion can occur.

# **CHRONIC HEALTH EFFECTS**

■ There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung. Prime symptom is breathlessness; lung shadows show on X-ray.

Repeated or prolonged exposure to antimony and its compounds may produce inflammation of the mouth cavity, dry throat, metallic taste, gum infection, perforation of the nasal septum and throat, laryngitis, headache, difficulty breathing, indigestion, nausea, vomiting, diarrhoea, loss of appetite, anaemia, weight loss, tightness and pain in the chest, sleeplessness, muscular pain and weakness, dizziness, pharyngitis, bronchitis and pneumonia. Degenerative changes of the liver and kidney may occur. Chronic exposure to antimony compounds may result in itchiness, spots and pus blisters around sweat glands. Workers exposed to antimony can develop obstructive lung disease. Antimony crosses the placenta and is excreted in breast milk. There may be an increased incidence of spontaneous late abortions, premature births, and gynaecological problems among female antimony smelter workers. Antimony may be associated with an increased incidence of cancers of the lung and chest.

Section 3 - COMPOSITION / INFORMA	ATION ON INGREDIENTS	
NAME	CAS RN	%
Sodium Stibogluconate	16037-91-5	>98.5

### **Section 4 - FIRST AID MEASURES**

#### **SWALLOWED**

- IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.
- For advice, contact a Poisons Information Centre or a doctor.
- Urgent hospital treatment is likely to be needed.
- In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.

#### EYE

If this product comes in contact with the eyes

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the
  upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

#### SKIN

If skin contact occurs

- Immediately remove all contaminated clothing, including footwear.
- Flush skin and hair with running water (and soap if available).
- Seek medical attention in event of irritation.

#### **INHALED**

- If fumes or combustion products are inhaled remove from contaminated area.
- Lay patient down. Keep warm and rested.
- Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.

#### **NOTES TO PHYSICIAN**

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- Chelation with British Anti-Lewisite (BAL) for serious antimony exposures should be employed.
- Dialyse as needed. The role of exchange diffusion is not clear.
- Be sure to monitor for dysrhythmias.

[Ellenhorn and Barceloux Medical Toxicology].

	Section 5 - FIRE FIGHTING MEASURES
Vapour Pressure (mmHG)	Not applicable
Upper Explosive Limit (%)	Not available
Specific Gravity (water=1)	Not available
Lower Explosive Limit (%)	Not available

### **EXTINGUISHING MEDIA**

- Water spray or fog.
- Foam.
- Dry chemical powder.
- BCF (where regulations permit).

# FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.
- Use fire fighting procedures suitable for surrounding area.

When any large container (including road and rail tankers) is involved in a fire,

consider evacuation by 800 metres in all directions.

### GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions.
- Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited particles exceeding this limit will generally not form flammable dust clouds.; once initiated, however, larger particles up to 1400 microns diameter will contribute to the propagation of an explosion.

- In the same way as gases and vapours, dusts in the form of a cloud are only ignitable over a range of concentrations; in principle, the concepts of lower explosive limit (LEL) and upper explosive limit (UEL).are applicable to dust clouds but only the LEL is of practical use; this is because of the inherent difficulty of achieving homogeneous dust clouds at high temperatures (for dusts the LEL is often called the "Minimum Explosible Concentration", MEC)
- A dust explosion may release of large quantities of gaseous products; this in turn creates a subsequent pressure rise of explosive force capable of damaging plant and buildings and injuring people.

Combustion products include carbon monoxide (CO), carbon dioxide (CO2), metal oxides, other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

#### FIRE INCOMPATIBILITY

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

#### Section 6 - ACCIDENTAL RELEASE MEASURES

# MINOR SPILLS

- Clean up waste regularly and abnormal spills immediately.
- Avoid breathing dust and contact with skin and eyes.
- Wear protective clothing, gloves, safety glasses and dust respirator.
- Use dry clean up procedures and avoid generating dust.

#### **MAJOR SPILLS**

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear full body protective clothing with breathing apparatus.
- Prevent, by any means available, spillage from entering drains or water course.

### **Section 7 - HANDLING AND STORAGE**

### PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

# **RECOMMENDED STORAGE METHODS**

- Glass container is suitable for laboratory quantities
- Lined metal can, lined metal pail/ can.
- Plastic pail.
- Polyliner drum.
- Packing as recommended by manufacturer.

For low viscosity materials

- Drums and jerricans must be of the non-removable head type.
- Where a can is to be used as an inner package, the can must have a screwed enclosure.

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### STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.

# Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

# **EXPOSURE CONTROLS**

Source	Material	TWA	TWA	STEL	STEL mg/m³	Peak	Peak	TWA	Notos
Source	Material	ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	F/CC	Notes

Canada - Alberta Occupational Exposure Limits	antimony sodium gluconate (Antimony & compounds, as Sb)	0.5	
Canada - British Columbia Occupational Exposure Limits	antimony sodium gluconate (Antimony and compounds, as Sb)	0.5	
US ACGIH Threshold Limit Values (TLV)	antimony sodium gluconate (Antimony and compounds, as Sb)	0.5	TLV® Basis Skin & URT irr
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	antimony sodium gluconate (Antimony, metal and compounds (as Sb))	0.5	
US OSHA Permissible Exposure Levels (PELs) - Table Z1	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	
US - Minnesota Permissible Exposure Limits (PELs)	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	
US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	
US - California Permissible Exposure Limits for Chemical Contaminants	antimony sodium gluconate (Antimony and compounds, as Sb)	0.5	
US - Idaho - Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	

US - Hawaii Air Contaminant Limits	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5		
US - Alaska Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5		
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	antimony sodium gluconate (Antimony and compounds, (as Sb))	0.5	1.5	
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	antimony sodium gluconate (Antimony and - compounds (as Sb))	0.5 -	0.75	
US - Washington Permissible exposure limits of air contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5	1.5	
US - Michigan Exposure Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds (as Sb))	0.5		
Canada - Prince Edward Island Occupational Exposure Limits	antimony sodium gluconate (Antimony and compounds, as Sb)	0.5		TLV® Basis Skin & URT irr
US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants	antimony sodium gluconate (Antimony and compounds(as Sb))	0.5		
Canada - Nova Scotia Occupational Exposure Limits	antimony sodium gluconate (Antimony - Compounds)	0.5		Measured as Sb. TLV Basis skin & upper respiratory tract irritation
US - Oregon Permissible Exposure Limits (Z-1)	antimony sodium gluconate (Antimony & - Compounds (as Sb))	0.5		
Canada - Northwest Territories Occupational	antimony sodium gluconate (Antimony and	0.5	1.5	

Exposure Limits compounds (as (English) Sb))

# PERSONAL PROTECTION









# **RESPIRATOR**

Particulate. (AS/NZS 1716 & 1715, EN 1432000 & 1492001, ANSI Z88 or national equivalent)

#### **FYF**

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

# HANDS/FEET

- Wear chemical protective gloves, eg. PVC.
- Wear safety footwear or safety gumboots, eg. Rubber

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

#### **OTHER**

- Overalls.
- Eyewash unit.
- Barrier cream.
- Skin cleansing cream.

### **ENGINEERING CONTROLS**

■ Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection

The basic types of engineering controls are

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.

# **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

# **PHYSICAL PROPERTIES**

Solid.

Mixes with water.

State	Divided solid	Molecular Weight	907.86
Melting Range (°F)	Not available	Viscosity	Not Applicable
Boiling Range (°F)	Not available.	Solubility in water (g/L)	Miscible
Flash Point (°F)	Not available	pH (1% solution)	9-10 (2% soln)
Decomposition Temp (°F)	Not Available	pH (as supplied)	Not applicable
Autoignition Temp (°F)	Not available	Vapour Pressure (mmHG)	Not applicable
Upper Explosive Limit (%)	Not available	Specific Gravity (water=1)	Not available

Lower Explosive Limit (%)	Not available	Relative Vapour Density (air=1)	Not applicable
Volatile Component (%vol)	Not applicable	Evaporation Rate	Not applicable

### **APPEARANCE**

Amorphous powder; mixes with water. Unstable at basic pHs. Occurs as both the trivalent and pentavalent form.

## **Section 10 - CHEMICAL STABILITY**

### **CONDITIONS CONTRIBUTING TO INSTABILITY**

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

### STORAGE INCOMPATIBILITY

Avoid reaction with oxidising agents

For incompatible materials - refer to Section 7 - Handling and Storage.

### Section 11 - TOXICOLOGICAL INFORMATION

antimony sodium gluconate

#### **TOXICITY AND IRRITATION**

No data for this material.

### **CARCINOGEN**

antimony sodium gluconate	US - Rhode Island Hazardous Substance List	IARC
ANTIMONY COMPOUNDS	US Environmental Defense Scorecard Suspected Carcinogens	Reference(s) P65-MC

# **Section 12 - ECOLOGICAL INFORMATION**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

This material and its container must be disposed of as hazardous waste.

Avoid release to the environment.

Refer to special instructions/ safety data sheets.

## **Ecotoxicity**

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
antimony sodium gluconate	No Data Available	No Data Available		

# **Section 13 - DISPOSAL CONSIDERATIONS**

### **Disposal Instructions**

All waste must be handled in accordance with local, state and federal regulations.

- Containers may still present a chemical hazard/ danger when empty.
- Return to supplier for reuse/ recycling if possible.

Otherwise:

- If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling

### • Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. In most instances the supplier of the material should be consulted.

- DO NOT allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Recycle wherever possible.
- Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material)
- Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

# **Section 14 - TRANSPORTATION INFORMATION**



### DOT:

Symbols:	None	Hazard class or Division:	6.1
Identification Numbers:	UN2811	PG:	III
Label Codes:	6.1	Special provisions:	IB8, IP3, T1, TP33
Packaging: Exceptions:	153	Packaging: Non-bulk:	213
Packaging: Exceptions:	153	Quantity limitations: Passenger aircraft/rail:	100 kg
Quantity Limitations: Cargo aircraft only:	200 kg	Vessel stowage: Location:	A
Vessel stowage: Other: Hazardous materials descriptions Toxic solids, organic, n.o.s. Air Transport IATA:	None and proper shipping names:		
ICAO/IATA Class:	6.1	ICAO/IATA Subrisk:	None
UN/ID Number:	2811	Packing Group:	III
Special provisions:	A3		
Special provisions: Cargo Only	A3		
	A3 677	Maximum Qty/Pack:	200 kg
Cargo Only		Maximum Qty/Pack: Passenger and Cargo	200 kg
Cargo Only Packing Instructions:		•	200 kg 100 kg
Cargo Only Packing Instructions: Passenger and Cargo	677	Passenger and Cargo	ū
Cargo Only Packing Instructions: Passenger and Cargo Packing Instructions: Passenger and Cargo	677	Passenger and Cargo Maximum Qty/Pack: Passenger and Cargo	ū
Cargo Only Packing Instructions: Passenger and Cargo Packing Instructions: Passenger and Cargo Limited Quantity Packing Instructions:	677 670	Passenger and Cargo Maximum Qty/Pack: Passenger and Cargo Limited Quantity Maximum Qty/Pack:	100 kg
Cargo Only Packing Instructions: Passenger and Cargo Packing Instructions: Passenger and Cargo Limited Quantity Packing Instructions: Shipping name:TOXIC SOLID, O	677 670 Y645	Passenger and Cargo Maximum Qty/Pack: Passenger and Cargo Limited Quantity Maximum Qty/Pack:	100 kg
Cargo Only Packing Instructions: Passenger and Cargo Packing Instructions: Passenger and Cargo Limited Quantity Packing Instructions: Shipping name:TOXIC SOLID, O Maritime Transport IMDG:	677 670 Y645 RGANIC, N.O.S.(contains antimon	Passenger and Cargo Maximum Qty/Pack: Passenger and Cargo Limited Quantity Maximum Qty/Pack: y sodium gluconate)	100 kg 10 kg

Limited Quantities: 5 kg Marine Pollutant: Yes

Shipping name: TOXIC SOLID, ORGANIC, N.O.S. (contains antimony sodium gluconate)

# **Section 15 - REGULATORY INFORMATION**

antimony sodium gluconate (CAS: 16037-91-5,12001-86-4) is found on the following regulatory lists;

"Canada - Alberta Occupational Exposure Limits", "Canada - British Columbia Occupational Exposure Limits", "Canada - Northwest Territories Occupational Exposure Limits (English)", "Canada - Nova Scotia Occupational Exposure Limits", "Canada - Prince Edward Island Occupational Exposure Limits", "Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)", "Canada -Saskatchewan Industrial Hazardous Substances", "Canada - Saskatchewan Occupational Health and Safety Regulations -Contamination Limits", "Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances", "Canada List of Prohibited and Restricted Cosmetic Ingredients (The Cosmetic Ingredient ""Hotlist"")","Canada National Pollutant Release Inventory (NPRI)","US -Alaska Limits for Air Contaminants", "US - California Environmental Health Standards for the Management of Hazardous Waste - List of Inorganic Persistent and Bioaccumulative Toxic Substances and Their STLC & TTLC Values", "US - California Occupational Safety and Health Regulations (CAL/OSHA) - Hazardous Substances List", "US - California Permissible Exposure Limits for Chemical Contaminants","US - California Toxic Air Contaminant List Category II","US - Connecticut Hazardous Air Pollutants","US - Hawaii Air Contaminant Limits","US - Idaho - Limits for Air Contaminants","US - Louisiana Minimum Emission Rates Toxic Air Pollutants","US -Louisiana Toxic Air Pollutant Ambient Air Standards". "US - Massachusetts Oil & Hazardous Material List". "US - Michigan Exposure Limits for Air Contaminants","US - Minnesota Hazardous Substance List","US - Minnesota Permissible Exposure Limits (PELs)","US -North Dakota Air Pollutants - Guideline Concentrations", "US - Oregon Permissible Exposure Limits (Z-1)", "US - Rhode Island Hazardous Substance List", "US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants", "US - Vermont Hazardous Constituents", "US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants", "US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants", "US - Washington Dangerous waste constituents list", "US -Washington Permissible exposure limits of air contaminants", "US - Wisconsin Control of Hazardous Pollutants - Emission Thresholds, Standards and Control Requirements (Hazardous Air Contaminants)", "US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants", "US ACGIH Threshold Limit Values (TLV)", "US Clean Air Act - Hazardous Air Pollutants", "US CWA (Clean Water Act) - Priority Pollutants", "US CWA (Clean Water Act) - Toxic Pollutants", "US OSHA Permissible Exposure Levels (PELs) - Table Z1", "US RCRA (Resource Conservation & Recovery Act) - Appendix IX to Part 264 Ground-Water Monitoring List 1","US RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261", "US RCRA (Resource Conservation & Recovery Act) - List of Hazardous Inorganic and Organic Constituents 1"

# **Section 16 - OTHER INFORMATION**

# LIMITED EVIDENCE

- Cumulative effects may result following exposure\*.
- May produce discomfort of the respiratory system and skin\*.
- Limited evidence of a carcinogenic effect\*.
- \* (limited evidence).

# Ingredients with multiple CAS Nos

Ingredient Name antimony sodium gluconate

CAS

16037-91-5, 12001-86-4

- Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

  A list of reference resources used to assist the committee may be found at:

  www.chemwatch.net/references.
- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings.
- For detailed advice on Personal Protective Equipment, refer to the following U.S. Regulations and Standards:

OSHA Standards - 29 CFR:

1910.132 - Personal Protective Equipment - General requirements

1910.133 - Eye and face protection

1910.134 - Respiratory Protection

1910.136 - Occupational foot protection

1910.138 - Hand Protection

Eye and face protection - ANSI Z87.1

Foot protection - ANSI Z41

Respirators must be NIOSH approved.

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