Clerici's Solution: sc-263071



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:Clerici's SolutionProduct Number:sc-263071

Product Number:	sc-263071
Supplier:	Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue
	Santa Cruz, CA 95060 800.457.3801 or 831.457.3800
Emergency:	ChemWatch Within the US & Canada: 877-715-9305
	Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

2. COMPOSITION/INFORMATION ON INGREDIENTS

Components: Clerici's Solution CAS Number: 61971-47-9 ACGIH Exposure Limits: None OSHA Exposure Limits: None Molecular Formula: C4H2O6Tl2 Molecular Weight: 554.82

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Danger, Highly Toxic by ingestion, inhalation, skin absorption. **Principle routes of exposure:** Skin

Inhalation	Poison - may be fatal if inhaled				
Ingestion	May be fatal if swallowed				
Skin contact	Contact causes skin irritation				
	May be fatal if absorbed through skin				

Eye contact May cause blindness

Statements of hazard

Toxic by inhalation, in contact with skin and if swallowed

Statement of Spill or Leak - ANSI Label

Isolate spillage. Evacuate unprotected persons. Use adequate protections when handling to avoid inhalation and contact with material.

4. FIRST AID MEASURES

General advice: Move out of dangerous area. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Inhalation: Move to fresh air. Call a physician immediately.

Skin contact: Remove contaminated cloths. Wash off immediately with soap and plenty of water Call a physician immediately

Ingestion: Call a physician immediately. Rinse mouth.

Eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

Protection of first-aiders: No information available

Medical conditions aggravated by exposure: None known

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Use dry chemical, CO2, water spray or "alcohol" foam Specific hazards: Burning can emit highly toxic fumes of Thallium, Carbon monoxide, carbon dioxide Unusual hazards: None known

Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressuredemand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific methods: No information available Flash point: Not determined

Autoignition temperature: Not determined

NFPA rating:

Health:	3
Flammability:	0
Reactivity:	1

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment.

Environmental precautions: Prevent product from entering drains.

Methods for cleaning up: Soak up with inert absorbent material. Retain all contaminated material for removal and treatment. Dispose off in accordance with all waste disposal regulations.

7. HANDLING AND STORAGE

Storage: Store at room temperature.

Handling: Use only in area provided with appropriate exhaust ventilation.

Safe handling advice: Wear personal protective equipment.

Incompatible products: Oxidizing and spontaneously flammable products

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Breathing apparatus only if aerosol or dust is formed.

Hand protection: Pvc or other plastic material gloves

Skin and body protection: Usual safety precautions while handling the product will provide adequate protection against this potential effect.

Eye protection: Safety glasses with side-shields

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state Boiling point/range Vapor pressure Vapor density Flash point Liquid No Data available No data available No data available Not determined Melting point/range Density Evaporation rate Solubility (in water) No data available 4.36 g/cm3 No data available No data available

10. STABILITY AND REACTIVITY

Stability: Stable under recommended storage conditions.

Polymerization: None under normal processing.

Hazardous decomposition products: Thermal decomposition can lead to release of irritating gases and vapors such as carbon oxides.

Materials to avoid: Strong oxidizing agents

Conditions to avoid: Exposure to air or moisture over prolonged periods.

11. TOXICOLOGICAL INFORMATION

Product Information Acute toxicity Components: Thalium (I) Malonate/Formate RTECS Number: Not Available Selected LD50s and LC50s: Not Determined Chronic toxicity: Chronic exposure may cause nausea and vomiting, higher exposure causes unconsciousness. Local effects: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Specific effects: May include moderate to severe erythema (redness) and moderate edema (raised skin), nausea, vomiting, headache. Primary irritation: No data is available on the product itself. Carcinogenic effects: No data is available on the product itself. Mutagenic effects: No data is available on the product itself. Reproductive toxicity: No data is available on the product itself.

12. ECOLOGICAL INFORMATION

Mobility: No data available Bioaccumulation: No data available Ecotoxicity effects: No data available

Aquatic toxicity: May cause long-term adverse effects in the aquatic environment.

Components	U.S. DOT - Appendix B - Marine Pollutan	U.S. DOT - Ap Severe Marin	•	United Kingdom - The Red	
Thallium (I) Malonate/Formate	Not Listed	Not Listed		Not Listed	
Components	Germany VCI (WGK)	World Health Organization (WHO) - Drinking Water		Ecotoxicity - Fish Species Data	
Thallium (I) Malonate/Formate	Not Listed	Not Listed		Not Listed	
Components	Ecotoxicity - Freshwater Algae Data	Ecotoxicity -	Microtox Data	Ecotoxicity - Water Flea Data	
Thallium (I) Malonate/Formate	Not Listed	Not Listed		Not Listed	
Components	EPA - ATSDR Priority List	EPA - HPV Challenge Program Chemical List		California - Priority Toxic Pollutants	
Thallium (I) Malonate/Formate	Not Listed	Not Listed		Not Listed	
Components Thallium (I) Malonate/Formate	California - Priority Toxic P Not Listed	ollutants	California - Pr Not Listed	iority Toxic Pollutants	

Components: Thallium (I) Malonate/Formate California - Priority Toxic Pollutants: Not listed California - Priority Toxic Pollutants: Not listed

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Residue from fires extinguished with this material may be hazardous.

Contaminated packaging: Do not re-use empty containers

Methods for cleaning up: Soak up with inert absorbent material. Retain all contaminated material for removal and treatment. Dispose off in accordance with all waste disposal regulations.

14. TRANSPORT INFORMATION

UN/Id No:		UN ID 2810				
DOT: Proper shipping nam IATA Hazard Label(s) Hazard Class Packing group:		Toxic, liquid, Toxic 6.1 II	organic, n.o.s			
Components U.S. DOT - Appendix A Table 1 - Reportable Quantities Thallium (I) Malonate/Formate Not Listed						
TDG (Canada): WHMIS hazard class:		D1a very toxic materials				
IMDG/IMO Proper shipping nam	e:	Toxic, liquid, organic, n.o.s				
IMDG - Hazard Classi	fications	6.1				
Components	U.S. DOT - Appendix B - M		U.S. DOT - Appendix B - Severe Marine Pollutants			
Thallium (I) Malonate/Formate	Not Listed		Not Listed			
15. REGULATORY INFORMATION International Inventories: Thallium (I) Malonate/Formate Inventory - United States TSCA - Sect. 8(b): Not listed						

Canada DSL Inventory List: Not listed **U.S. regulations:** California Proposition 65 Massachusetts Right to New Jersey Right to Components Pennsylvania Right to Know Know List: Know List: List: Thallium (I) Malonate/Formate Not Listed Not Listed Not Listed Not Listed Components Florida substance List: Rhode Island Right to Illinois - Toxic Air **Connecticut - Hazardous Air** Know List: Contaminants Pollutants Thallium (I) Malonate/Formate Not Listed Not Listed Not Listed Not Listed SARA 313 Emission **CERCLA/SARA - Section NTP:** IARC: Components reporting/Toxic Release 302 Extremely Haz of Chemicals Not Listed None None Thallium (I) Malonate/FormateNot Listed

SARA 313 Notification: The above is your notification as to the SARA 313 listing for this product(s) pursuant to Section 313 of Title III of the Superfund Ammendments and Reauthorization Act of 1986 and 40 CFR Part 372. If you are unsure if you are subject to the reporting requirements of Section 313, or need more information, please call the EPA Emergency Planning and Community Right-To-Know Information Hotline: (800) 535-0202 or (202) 479-2499 (in Washington, DC or Alaska).

State Notification: The above information is your notice as to the Right-to-Know listings of the stated product(s). Individual states will list chemicals for a variety of reasons including, but not limited to, the compounds toxicity; carcinogenic, tumorigenic and/or reproductive hazards; and the compounds environmental impact if accidentally released.

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user. 12/17/2012