(Phenylthio)methyltriphenylphosphonium Chloride: sc-212555

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: (Phenylthio)methyltriphenylphosphonium Chloride
Product Number: sc-212555

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. HAZARDS IDENTIFICATION

WHMIS Classification (Canada)

D2B Toxic Material Causing Other Toxic Effects
Moderate Skin/Eye/Respiratory Tract Irritant

WHMIS Symbols (Canada)

Classification of the Substance or Mixture and Label Elements

GHS Hazards Classification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Skin Irritation (Category 2)
Serious Eye Irritation (Category 2)
Specific Target Organ Toxicity, Single Exposure; Respiratory Tract Irritation (Category 3)

EU Classification (According to EU Regulation 67/548/EEC)

Irritating to eyes, respiratory system and skin.

EU Risk and Safety Statements (According to EU Regulation 67/548/EEC)

Hazard Statements **Hazard Codes**
Irritant Xi

Risk Codes and Phrases

R36/37/38 Irritating to eyes, respiratory system and skin.

Safety Precaution Codes and Phrases

S22 Do not breathe dust.
S37/39 Wear suitable gloves and eye/face protection.

GHS Hazards Identification (According to EU Regulation 1272/2008 and US OSHA 1910.1200)

Signal Word Warning

GHS Hazard Statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

GHS Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P302/P352 IF ON SKIN: Wash with plenty of soap and water.
P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Unclassified Hazards/Hazards Not Otherwise Classified
No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances
Molecular Formula: C25H22ClPS
Molecular Weight: 420.93
CAS Registry #: 13884–92–9
EC#: -
Synonyms
Triphenyl[(phenylthio)methyl]phosphonium Chloride
Mixtures
Not a mixture

4. FIRST AID MEASURES

Description of First Aid Measures
General Advice
If medical attention is required, show this safety data sheet to the doctor.
If Inhaled
If inhaled, move casualty to fresh air. If not breathing, give artificial respiration and consult a physician.
In Case of Skin Contact
Wash affected area with soap and water. Consult a physician if any exposure symptoms are observed.
In Case of Eye Contact
Immediately rinse eyes with plenty of water for at least 15 minutes. Consult a physician.
If Swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Do NOT induce vomiting unless advised to do so by a physician or Poison Control Center. Seek medical attention.
Most Important Symptoms and Effects, Both Acute and Delayed
No data available
Indication of any Immediate Medical Attention and Special Treatment Needed
No data available

5. FIREFIGHTING MEASURES

Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special Hazards Arising from the Substance or Mixture
Carbon oxides, Phosphorous oxides, Sulfur oxides, Hydrogen chloride
Advice for Firefighters
Wear self contained breathing apparatus for fire fighting if necessary.
Further Information
No data available

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Use recommended personal protective equipment (see Section 8). Prevent the formation of dusts and mists. Adequate ventilation must be provided to ensure dusts or mists are not inhaled.
Environmental Precautions
Material should not be allowed to enter the environment. Prevent further spillage or discharge into drains, if safe to do so.

Methods and Materials for Containment and Cleaning Up
Contain the spill and then collect using non-combustible absorbent material (such as clay, diatomaceous earth, vermiculite or other appropriate material). Place material in a suitable, sealable container and then dispose according to local/national regulations and guidance (see Section 13).
For protective equipment, refer to Section 8. For disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Avoid contact with skin and eyes. Ventilation and proper handling are to be used to prevent the formation of dusts and mists. Normal measures for preventative fire protection. No smoking, eating or drinking around this material. Wash hands after use.
Conditions for Safe Storage, Including any Incompatibilities
Ensure container is kept securely closed before and after use. Keep in a well ventilated area and do not store with strong oxidizers or other incompatible materials (see Section 10). Store at 4° C.
Specific End Uses
For scientific research and development only. Not for use in humans or animals.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters
Contains no components with established occupational exposure limits.
Exposure Controls
Appropriate Engineering Controls
A laboratory fume hood or other appropriate form of local exhaust ventilation should be used to avoid exposure.
Personal Protective Equipment
All recommendations below are advisory in nature and a risk assessment should be performed by the employer/ end user prior to use of this product. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.
Eye/Face Protection
Safety glasses or safety goggles. All equipment should have been tested and approved under appropriate standards, such as NIOSH (US), CSA (Canada), or EN 166 (EU).
Skin Protection
Gloves should be used when handling this material. Gloves are to be inspected prior to use. Contaminated gloves are to be removed using proper glove removal technique so that the outer surface of the glove does not contact bare skin. Dispose of contaminated gloves after use in compliance with good laboratory practices and local requirements.

"waterproof" by EU standard EN 374. Unrated gloves are not recommended. Penetration time has not been determined.

Gloves used for prolonged direct exposure (immersion) should be designated "chemical resistant" as per EN 734 with the resistance codes corresponding to the anticipated use of the material. Penetration time has not been determined.

These recommendations may not apply if the material is mixed with any other chemical, or dissolved into a solution. A risk assessment must be performed to ensure the gloves will still offer acceptable protection.
Body Protection
Fire resistant (Nomex) lab coat or coveralls.
Respiratory Protection
Recommended respirators are NIOSH-approved N95 or CEN-approved FFP2 particulate respirators. These are to be only used as a backup to local exhaust ventilation or other engineering controls. If the respirator is the only means of protection, a full-face supplied air respirator must be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Form	Solid	Odor Threshold	No data available
Melting Point/Freezing Point	223–226°C	Flash point	No data available
Flammability (Solid/Gas)	No data available	Vapor Pressure	No data available
Relative Density	No data available	Solubility	Methanol
Viscosity	No data available	Oxidizing Properties	No data available

Decomposition Temperature	No data available	Explosive Properties	No data available
Auto-Ignition Temperature	No data available	pH	No data available
Upper/Lower Flammability/ Explosive Limits	No data available	Evaporation Rate	No data available
Vapor Density	No data available	Odor	No data available
Initial Boiling Point/ Boiling Range	No data available	Partition Coefficient: n-octanol/water	No data available

Other Information
no data available

10. STABILITY AND REACTIVITY

Reactivity
No data available
Chemical Stability
Stable under recommended storage conditions.
Possibility of Hazardous Reactions
No data available
Conditions to Avoid
No data available
Incompatible Materials
Strong oxidizing agents.
Hazardous Decomposition Products
No data available

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects
Acute Toxicity
No data available
Skin Corrosion/Irritation
Moderate skin/eye/respiratory tract irritant.
Serious Eye Damage/Irritation
No data available
Respiratory or Skin Sensitization
No data available
Germ Cell Mutagenicity
No data available
Carcinogenicity
No data available
Reproductive Toxicity/Teratogenicity
No data available
Single Target Organ Toxicity – Single Exposure
Moderate respiratory tract irritation.
Single Target Organ Toxicity – Repeated Exposure
No data available
Aspiration Hazard
No data available
Potential Health Effects and Routes of Exposure

- **Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.
- **Ingestion** May be harmful if swallowed.
- **Skin** May be harmful if absorbed through skin. Causes skin irritation.
- **Eyes** Causes eye irritation.

Signs and Symptoms of Exposure
No data available
To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been thoroughly investigated.
Additional Information
RTECS: Not listed

12. ECOLOGICAL INFORMATION

Toxicity
No data available
Persistance and Degradability
No data available
Bioaccumulative Potential
No data available
Mobility in Soil
No data available
Results of PBT and vPvB Assessment
No data available
Other Adverse Effects
No data available

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods
Product Product may be burned in an incinerator equipped with afterburner and scrubber. Excess and expired materials are to be offered to a licensed hazardous material disposal company. Ensure that all Federal and Local regulations regarding
the disposal and destruction of this material are followed.
Contaminated Packaging
Dispose of as above.
Other Considerations
Product is not to be disposed of in sanitary sewers, storm sewers, or landfills.

14. TRANSPORT INFORMATION

DOT (US)	IMDG	IATA
Not dangerous goods	Not dangerous goods	Not dangerous goods

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of WHMIS (Canada), OSHA 1910.1200 (US), and EU Regulation EC No. 1907/2006 (European Union).
Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture Canada
DSL/NDSL Status: This product is not listed on the Canadian DSL/NDSL.
United States
TSCA Status: This product is not listed on the US EPA TSCA.
European Union
ECHA Status: This product is not registered with the EU ECHA.
Chemical Safety Assessment
No data available

16. OTHER INFORMATION

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.

2/13/2013