## MATERIAL SAFETY DATA SHEET

Date Printed: 03/19/2007 Date Updated: 01/30/2006 Version 1.4

Section 1 - Product and Compa	any Information	
Product Name Product Number Brand	P-XYLYLENEBIS(TETRAHYDROTHIOPHEN) CHLORIDE), TECH., 90% 377082 ALDRICH	LOW
Company Address	Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 US	
Technical Phone: Fax: Emergency Phone:	800-325-5832 800-325-5052 314-776-6555	
Section 2 - Composition/Infor	rmation on Ingredient	
Substance Name P-XYLYLENEBIS(TETRAHYDROTHIOE CHLORIDE)	CAS # PHENIUM 52547-07-6	SARA 313 No
Formula C16H24Cl2S2		
Section 3 - Hazards Identific	cation	
EMERGENCY OVERVIEW Irritant. Irritating to eyes, respir HMIS RATING HEALTH: 1	atory system and skin.	
FLAMMABILITY: 0 REACTIVITY: 1 NFPA RATING HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 1		
For additional information or	n toxicity, please refer to Sectio	on 11.
Section 4 - First Aid Measure	es	
ORAL EXPOSURE If swallowed, wash out mou conscious. Call a physicia	ath with water provided person is	
	sh air. If not breathing give breathing is difficult, give oxy	ygen.
DERMAL EXPOSURE In case of contact, immedi amounts of water.	ately wash skin with soap and co	pious

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT N/A AUTOIGNITION TEMP N/A FLAMMABILITY N/A EXTINGUISHING MEDIA Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. FIREFIGHTING Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. Section 6 - Accidental Release Measures PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. METHODS FOR CLEANING UP Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Section 7 - Handling and Storage HANDLING User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. STORAGE Suitable: Keep tightly closed. SPECIAL REQUIREMENTS Hygroscopic. Section 8 - Exposure Controls / PPE ENGINEERING CONTROLS Safety shower and eye bath. Mechanical exhaust required. PERSONAL PROTECTIVE EQUIPMENT Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Hand: Compatible chemical-resistant gloves. Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties Physical State: Solid Appearance Color: White Form: Powder Value Property At Temperature or Pressure Molecular Weight 351.41 AMU рH N/A BP/BP Range N/A MP/MP Range 162.0 - 168.0 °C Freezing Point N/A Vapor Pressure N/A Vapor Density N/A Saturated Vapor Conc. N/A SG/Density N/A Bulk Density N/A Odor Threshold N/A Volatile% N/A VOC Content N/A Water Content N/A Solvent Content N/A Evaporation Rate N/A Viscosity N/A Surface Tension N/A Partition Coefficient N/A Decomposition Temp. N/A Flash Point N/A Explosion Limits N/A Flammability N/A Autoignition Temp N/A Refractive Index N/A Optical Rotation N/A Miscellaneous Data N/A Solubility N/A

N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable. Conditions to Avoid: Moisture. Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Hydrogen chloride gas, Sulfur oxides.

HAZARDOUS POLYMERIZATION Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE Skin Contact: Causes skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: Causes eye irritation. Inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract. Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

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Non-Hazardous for Air Transport: Non-hazardous for air transport.
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Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION Symbol of Danger: Xi Indication of Danger: Irritant. R: 36/37/38 Risk Statements: Irritating to eyes, respiratory system and skin. S: 26-36 Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US CLASSIFICATION AND LABEL TEXT Indication of Danger: Irritant. Risk Statements: Irritating to eyes, respiratory system and skin. Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

UNITED STATES REGULATORY INFORMATION SARA LISTED: No

CANADA REGULATORY INFORMATION WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. DSL: No NDSL: No

Section 16 - Other Information

## DISCLAIMER

For R&D use only. Not for drug, household or other uses.

## WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2007 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.