

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product (material) Name:** Thiocarbonylhydrazide. Catalogue # C076.  
**Other Names:** TCH  
**Recommended Use:** Osmiophilic Reagent.

**Supplier Name:** ProSciTech  
**Postal Address:** PO Box 111, Thuringowa Central Qld. 4817 Australia  
**Street Address:** 1/11 Carlton Street, Kirwan, Qld. 4817 Australia  
**Telephone Number:** (07) 4773 9444  
**Fax Number:** (07) 4773 2244  
**Emergency Contact:** (07) 4773 9444 8:30am – 5:00pm, Monday to Friday

## SECTION 2 - HAZARDS IDENTIFICATION

**Hazard Classification:** Hazardous according to criteria of NOHSC.  
**Risk Phrases:** R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed. R5: Heating may cause an explosion.  
**Safety Phrases:** S45: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible). S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

## SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS

**SUBSTANCE:**  
**Chemical Identity:** Thiocarbonylhydrazide  
**Common Name(s):** TCH  
**CAS Number(s):** 2231-57-4

### MIXTURE:

| Ingredients           | Cas Number(s) | Proportion (%) |
|-----------------------|---------------|----------------|
| Thiocarbonylhydrazide | 2231-57-4     |                |

## SECTION 4 - FIRST AID MEASURES

**Swallowed:** Wash out mouth with water (provided the person is conscious). Seek immediate medical attention.  
**Eye:** Flush eye with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs/persists.  
**Skin:** Remove contaminated clothing. Flush skin with plenty of water for at least 15 minutes. Wash contaminated clothing before reusing. If irritation occurs/persists seek medical attention.  
**Inhaled:** Remove person to fresh air. If not breathing give artificial respiration, if breathing is difficult give oxygen. Seek medical attention.  
**First Aid Facilities:** Safety shower and eyewash.  
**Medical Attention & Special Treatment:**

ADDITIONAL INFORMATION:

## SECTION 5 - FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, carbon dioxide, dry chemical powder or appropriate foam.  
**Hazards from Combustion Products:**  
**Precautions for Fire Fighters:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Material may explode when heated.  
**Hazchem Code:**

**SECTION 6 - ACCIDENTAL RELEASE MEASURES****Emergency Procedures:**

**Containment and clean up:** Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Sweep up material and place in a bag. Hold for waste disposal. Avoid raising dust. Ventilate the area and wash spill site after material pickup is complete.

**SECTION 7 - HANDLING & STORAGE**

**Precautions for Safe Handling:** Wear appropriate protection equipment. Minimise contact with material, wash thoroughly after handling.

**Conditions for Safe Storage:** Keep container tightly closed and store in a cool dry place.

**SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION**

**National Exposure Standards:** No exposure standard allocated.

**Biological Limit Values:** No biological limit allocated.

**Engineering Controls:** Use only under a chemical fume hood.

**Personal Protective Equipment:** Wear NIOSH/MSHA approved respirator, chemical resistant gloves, safety goggles and other protective clothing.

**SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES**

**Appearance:** White crystalline powder.

**Odour:** Not available.

**pH:** Not available.

**Vapour pressure:** Not available.

**Vapour density:** Not available.

**Boiling point/range:** Not available.

**Freezing/melting point:** MP: 171°C - 174°C.

**Solubility:** Not available.

**Specific gravity or density:** Not available.

**Flash Point:** Not available.

**Flammable (explosive) limits:** Not available.

**Ignition temperature:** Not available.

**Additional Information:**

**SECTION 10 - STABILITY AND REACTIVITY**

**Chemical stability:** Stable.

**Conditions to avoid:** Store away from heat and direct sunlight.

**Incompatible Materials:** Strong oxidising agents and acids.

**Hazardous Decomposition Products:** Fumes can contain: carbon monoxide, carbon dioxide, nitrogen oxide, sulphur oxides.

**Hazardous Reactions:**

**SECTION 11 - TOXICOLOGICAL INFORMATION**

**Acute and chronic health effects:** Eye: RBT 50 MG Mild. Oral: Rat LD50 21600 UG/KG, Mus LD50 6mg/kg, Gpg LD50 8200 ug/kg. Inhalation: Rat LC50 50mg/m<sup>3</sup>/4hrs. Skin: Rat LD50 >500mg/kg.

**Possible routes of exposure:** Skin/eye contact, inhalation, ingestion.

**Range of effects following exposure:** May be fatal if inhaled, swallowed or absorbed through skin. May cause irritation.

**Dose likely to cause injury:**

**Delayed effects:**

**Relevant negative data:**

**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:**

**Persistence and degradability:**

**Mobility:**

**Additional Information:**

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Disposal Methods:** Contact a licensed professional waste disposal service.  
**Special Precautions:**

**SECTION 14 - TRANSPORT INFORMATION**

**UN Number:**  
**UN Proper Shipping Name:**  
**Class and Subsidiary risk:**  
**Packing Group:**  
**Special Precautions for User:**  
**Hazchem Code:**

**SECTION 15 - REGULATORY INFORMATION**

**Poison Schedule Number:** None allocated

**SECTION 16 - OTHER INFORMATION**

**Date of preparation of MSDS:** 24 September 2007.

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