



## Material Safety Data Sheet

### *Section 1 - Chemical Product and Company Identification*

*MSDS Name:* Tetrahydrothiopyran-4-one  
*Synonyms:*  
*Company Identification:* MIC Scientific Ltd.  
Room 4-903, Building 12A  
Dongxin Road, East Lake Hi-tech Development Zone  
Wuhan 430074, China  
*Telephone Number:* 86-27-87861439  
*Fax Number:* 86-27-87861443  
*Emergency Number:* 86-27-68756766

### *Section 2 - Product Information*

*Catalog Number:* HC102268  
*CAS Number:* 1072-72-6  
*MDL Number:* MFCD00006660  
*EC Number:* 214-015-7  
*Molecular Formula:* C<sub>5</sub>H<sub>8</sub>OS  
*Molecular Weight:* 116.18  
*Purity:* 98.0%

### *Section 3 - Physical and Chemical Properties*

*Physical state:* Crystalline powder  
*Color:* White to off-white  
*Odor:* Not available  
*Freezing/Melting Point:* 62-65 deg C  
*Boiling Point:* Not available  
*Flash Point:* Not available  
*Autoignition Temperature:* Not available  
*Refractive Index (n<sub>D</sub>20):* Not available  
*Density:* Not available  
*Decomposition Temperature:* Not available  
*Solubility:* Insoluble in water

### *Section 4 - Hazards Identification*

*Eye:* Causes eye irritation.  
*Skin:* Causes skin irritation. Harmful if absorbed through the skin.  
*Ingestion:* May cause irritation of the digestive tract. Toxic if swallowed.



*Inhalation:* May be harmful if inhaled. Causes respiratory tract irritation.

### ***Section 5 - First Aid Measures***

*Eye:* Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

*Skin:* Get medical aid. Flush skin with plenty of water and soap for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops and persists.

*Ingestion:* Get medical aid immediately. Wash mouth out with water.

*Inhalation:* Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

### ***Section 6 - Stability and Reactivity***

*Chemical Stability:* Stable under normal temperatures and pressures.

*Materials to avoid:* Strong oxidizing agents.

*Conditions to Avoid:* Incompatible materials.

*Hazardous Decomposition Products:* Carbon monoxide, carbon dioxide, sulfur oxides.

*Hazardous Polymerization:* Will not occur.

### ***Section 7 - Handling and Storage***

*Handling:* Avoid breathing dust, vapor, mist, or gas. Keep container tightly closed. Avoid contact with skin and eyes. Wash thoroughly after handling. Mechanical exhaust required.

*Storage:* Store in a cool, dry well ventilated place away from sources of heat and incompatible substances. Keep container tightly closed when not in use.

### ***Section 8 - Personal Protection***

*Eyes:* Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

*Skin:* Wear appropriate protective gloves to prevent skin exposure.

*Clothing:* Wear appropriate protective clothing to prevent skin exposure.

*Respirators:* Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### ***Section 9 - Fire and Explosion Hazard Data***

*General Information:* As in any fire, wear a self-contained breathing apparatus, MSHA/NIOSH (approved or equivalent) and protective clothing to prevent contact with skin and eyes.

*Extinguishing Media:* Use water spray, dry chemical, carbon dioxide, or appropriate foam.

### ***Section 10 - Accidental Release Measures***



**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

### ***Section 11 - Toxicological Information***

**RTECS#:** CAS#1072-72-6: Not available

**LD50/LC50:** RTECS: Not available.

**Carcinogenicity:** Tetrahydrothiopyran-4-one - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

### ***Section 12 - Environmental information***

Not available

### ***Section 13 - Disposal Consideration***

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***

**IATA:** This substance is considered to be non-hazardous for transport.

**IMO:** This substance is considered to be non-hazardous for transport.

**RID/ADR:** This substance is considered to be non-hazardous for transport.

### ***Section 15 - Regulatory Information***

#### ***European/International Regulations***

European Labeling in Accordance with EC Directives

Hazard Symbols: Xi

Indication of Danger: Irritant

Risk Phrases:

R 22: Harmful if swallowed.

Safety Phrases:

S 24/25: Avoid contact with skin and eyes.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS#1072-72-6: 3

Canada

CAS#1072-72-6: Not available

#### ***US Federal***

**TSCA**

CAS# 1072-72-6 is not listed on the TSCA Inventory. It is for research and development use only.

### ***Section 16 - Additional Information***



MSDS Creation Date: December 25, 2007

Update: May 20, 2009

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