Material Safety Data Sheet
2-[(1,1-Dioxotetrahydro-1h-1lambda~6~--thiophen-3-yl)amino]acetic acid, 97%

ACC# 05787

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-[(1,1-Dioxotetrahydro-1h-1lambda~6~--thiophen-3-yl)amino]acetic acid, 97%
Catalog Numbers: BTB13823CB, BTB13823DA
Synonyms: 3-(Carboxymethylamino)thiolane-1,1-dioxide
Company Identification:
Maybridge PLC
Trevillett, Tintagel
Cornwall, England. PL34 0HW
For information, call: +44(0)1840770453
For emergencies, call: +44(0)7702924616

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>51070-56-5</td>
<td>2-[(1,1-Dioxotetrahydro-1H-1lambda<del>6</del>--thiophen-3-yl)amino]acetic acid</td>
<td>97%</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Hazard Symbols: XN
Risk Phrases: 20/21/22 36/37/38

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Not available. Appearance: white solid. Not available.
Target Organs: Respiratory system, eyes, skin.

Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. Harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Harmful if inhaled. Causes respiratory tract irritation.
Chronic: Not available.

Section 4 - First Aid Measures

Eyes: 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 for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid. 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.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.
Flash Point: Not available.
Autoignition Temperature: Not available.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: Not published.

Section 6 - 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 7 - Handling and Storage

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-[(1,1-Dioxotetrahydro-1H-1lambda<del>6</del>thiophen-3-yl)amino]acetic acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: 2-[(1,1-Dioxotetrahydro-1H-1lambda~6~thiophen-3-yl)amino]acetic acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Not available.
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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties
Physical State: Solid
Appearance: white
Odor: Not available.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: Not available.
Freezing/Melting Point: 268 - 270 deg C
Decomposition Temperature: Not available.
Solubility: Not available.
Specific Gravity/Density: Not available.
Molecular Formula: C6H11NO4S
Molecular Weight: 193

Section 10 - Stability and Reactivity

Chemical Stability: Not available.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials: Oxidizing agents, bases, acid chlorides.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, oxides of sulfur, carbon dioxide, acrid smoke and fumes.
Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#: 
CAS# 51070-56-5 unlisted.
LD50/LC50: Not available.

Carcinogenicity:
CAS# 51070-56-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology: No data available.
Teratogenicity: No data available.
Reproductive Effects: No data available.
Neurotoxicity: No data available.
Mutagenicity: No data available.
Other Studies: The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. **RCRA P-Series**: None listed. **RCRA U-Series**: None listed.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th></th>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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</thead>
<tbody>
<tr>
<td><strong>Shipping Name</strong></td>
<td>DOT regulated - small quantity provisions apply (see 49CFR173.4)</td>
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<tr>
<td><strong>Hazard Class</strong></td>
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<td><strong>UN Number</strong></td>
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<tr>
<td><strong>Packing Group</strong></td>
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### Section 15 - Regulatory Information

**US FEDERAL**

**TSCA**
CAS# 51070-56-5 is not listed on the TSCA inventory. It is for research and development use only.

**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**
None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**
None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.

**SARA**

**CERCLA Hazardous Substances and corresponding RQs**
None of the chemicals in this material have an RQ.

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**Section 313**
No chemicals are reportable under Section 313.

**Clean Air Act:**
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

**Clean Water Act:**
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
CAS# 51070-56-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ. California No Significant Risk Level: None of the chemicals in this product are listed.

https://fscimage.fishersci.com/msds/05787.htm
European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
XN

Risk Phrases:
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

WGK (Water Danger/Protection)
CAS# 51070-56-5: No information available.

Canada - DSL/NDSL
None of the chemicals in this product are listed on the DSL or NDSL list. Canada - WHMIS
WHMIS: Not available.

Canadian Ingredient Disclosure List

Exposure Limits

| Section 16 - Additional Information |

MSDS Creation Date: 6/10/2003
Revision #0 Date: Original.

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