SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product Name: Thieno[3,2-b]thiophene-2-carbonitrile
Synonyms: 2-Cyanothieno[3,2-b]thiophene
Chemical Name: Thieno[3,2-b]thiophene-2-carbonitrile
Chemical Formula: C7H3NS2
Product code: B281
CAS No.: 40985-58-8
EC No.: 808-215-9
REACH Registration No.: Not applicable.

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified Use(s): PC21 Laboratory chemicals

1.3 Details of the supplier of the safety data sheet
Company Identification: Ossila Limited
Address of Supplier: Solpro Business Park
Postal code: S4 7WB, UK
Telephone: +441142999180
E-mail: info@ossila.com
Office hours: 08:00 - 17:00

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Regulation (EC) No. 1272/2008 (CLP)
- Acute Tox. 4: Harmful if swallowed.
- Acute Tox. 4: Harmful in contact with skin.
- Acute Tox. 4: Harmful if inhaled.
- Skin Irrit. 2: Causes skin irritation.
- Eye Irrit. 2: Causes serious eye irritation.

2.2 Label elements
According to Regulation (EC) No. 1272/2008 (CLP)
Product Name: Thieno[3,2-b]thiophene-2-carbonitrile
Hazard Pictogram(s): GHS07
Signal Word(s): Warning
Hazard Statement(s): H302: Hazardous if swallowed.
H312: Harmful in contact with skin.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
Precautionary Statement(s): P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280: Wear protective gloves/ protective clothing/ eye protection.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302+P352: IF ON SKIN: Wash with plenty of water.
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards
None known.

2.4 Additional Information
Not applicable.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT(S)</th>
<th>CAS No.</th>
<th>EC No. / REACH Registration No.</th>
<th>%W/W</th>
<th>Hazard Statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thieno[3,2-b]thiophene-2-carbonitrile</td>
<td>40985-58-8</td>
<td>808-215-9</td>
<td>100</td>
<td>Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332 Skin Irrit. 2 H315 Eye Irrit. 2 H319</td>
</tr>
</tbody>
</table>

3.2 Mixtures
Not applicable.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures
Inhalation Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin Contact Rinse skin with water. If skin irritation occurs, get medical advice/attention.
Eye Contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Ingestion Rinse out mouth with water. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed
SECTION 11: Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing media As appropriate for surrounding fire.
Unsuitable extinguishing media As appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture
May decompose in a fire, giving off toxic and irritant vapours.

5.3 Advice for firefighters
Firefighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Wear protective clothing as per section 8.
6.2 Environmental precautions
Avoid release to the environment.

6.3 Methods and material for containment and cleaning up
Sweep up spilled substance but avoid making dust. Use vacuum equipment for collecting spilt materials, where practicable. Dispose of contents in accordance with local, state or national legislation.

6.4 Reference to other sections
See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid breathing dust/aerosols. Use only in a well-ventilated area. Wear protective clothing as per section 8.

7.2 Conditions for safe storage, including any incompatibilities
Store in a well-ventilated place. Keep container tightly closed.
Storage temperature Ambient.
Storage life Stable under normal conditions.
Incompatible materials None known.

7.3 Specific end use(s)
Not known. See Section: 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
8.1.1 Occupational Exposure Limits
No Occupational Exposure Limit assigned.
8.2 Exposure controls
8.2.1. Appropriate engineering controls  Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment
   Eye Protection  Wear eye protection with side protection (EN166).

   Skin protection  Wear protective clothing and gloves: Impervious gloves (EN 374).

   Respiratory protection  A suitable mask with filter type A (EN14387 or EN405) may be appropriate.

   Thermal hazards  None known.

8.2.3. Environmental Exposure Controls  Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
   Appearance  Solid
   Colour: No data available.
   Odour  Not known.
   Odour threshold  Not known.
   pH  Not known.
   Melting point/freezing point  50°C (lit.)
   Initial boiling point and boiling range  Not known.
   Flash Point  Not known.
   Evaporation rate  Not known.
   Flammability (solid, gas)  Not known.
   Upper/lower flammability or explosive limits  Not known.
   Vapour pressure  Not known.
   Vapour density  Not known.
   Density (g/ml)  Not known.
   Relative density  Not known.
   Solubility(ies)  Solubility (Water): Not known.
                  Solubility (Other): Not known.
   Partition coefficient: n-octanol/water  Not known.
   Auto-ignition temperature  Not known.
   Decomposition Temperature (°C)  Not known.
   Viscosity  Not known.
   Explosive properties  Not known.
   Oxidising properties  Not known.

9.2 Other information  None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity  None anticipated.
10.2 Chemical Stability  Stable under normal conditions.
10.3 Possibility of hazardous reactions  Not known.
10.4 Conditions to avoid  Not known.
10.5 Incompatible materials  Not known.
10.6 Hazardous decomposition products

No hazardous decomposition products known.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

| Acute toxicity - Ingestion       | Harmful if swallowed. |
| Acute toxicity - Skin Contact   | Harmful in contact with skin. |
| Acute toxicity - Inhalation     | Harmful if inhaled. |
| Skin corrosion/irritation       | Causes skin irritation. |
| Serious eye damage/irritation   | Causes serious eye irritation. |
| Skin sensitization data         | Not classified. |
| Respiratory sensitization data  | Not classified. |
| Germ cell mutagenicity          | Not classified. |
| Carcinogenicity                 | Not classified. |
| Reproductive toxicity           | Not classified. |
| Lactation                       | Not classified. |
| STOT - single exposure          | Not classified. |
| STOT - repeated exposure        | Not classified. |
| Aspiration hazard               | Not classified. |

#### 11.2 Other information

Not known.

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Toxicity

| Aquatic invertebrates | Not known. |
| Fish                 | Not known. |
| Algae                | Not known. |
| Sediment Compartment | Not classified. |
| Terrestrial Compartment | Not classified. |

#### 12.2 Persistence and Degradation

Not known.

#### 12.3 Bioaccumulative potential

Not known.

#### 12.4 Mobility in soil

Not known.

#### 12.5 Results of PBT and vPvB assessment

Not known.

#### 12.6 Other adverse effects

Not known.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator.

#### 13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

### SECTION 14: TRANSPORT INFORMATION

IATA/IMO/RID/ADR Not classified as hazardous for transport.

### SECTION 15: REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

<table>
<thead>
<tr>
<th>European Regulations - Authorisations and/or Restrictions On Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Candidate List of Substances of Very High Concern for Authorisation</td>
</tr>
<tr>
<td>REACH: ANNEX XIV list of substances subject to authorisation</td>
</tr>
<tr>
<td>REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</td>
</tr>
<tr>
<td>Community Rolling Action Plan (CoRAP)</td>
</tr>
</tbody>
</table>
Not listed

Regulation (EC) No° 1005/2009 on substances that deplete the ozone layer
Not listed

Regulation (EU) No° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals
Not listed

**National regulations**

Not known.

**15.2 Chemical Safety Assessment**

A REACH chemical safety assessment has not been carried out.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

**Acronyms**

- ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
- CAS : Chemical Abstracts Service
- CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
- DNEL : Derived No Effect Level
- EC : European Community
- EINECS : European Inventory of Existing Commercial Chemical Substances
- IATA : International Air Transport Association
- IBC : Intermediate Bulk Container
- ICAO : International Civil Aviation Organization
- IMDG : International Maritime Dangerous Goods
- LTEL : Long term exposure limit
- PBT : Persistent, Bioaccumulative and Toxic
- PNEC : Predicted No Effect Concentration
- REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
- STEL : Short term exposure limit
- STOT : Specific Target Organ Toxicity
- UN : United Nations
- vPvB : very Persistent and very Bioaccumulative

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