Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPANOATE
CAS number: 26510-52-1
Product code: OR5897
Synonyms:
- ETHYL PICOLINOYLACETATE
- ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPIONATE
- 2-(3-ETHOXY-3-OXOPROPAOYL)PYRIDINE

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Company name: Apollo Scientific Ltd
Units 3 & 4
Parkway
Denton
Manchester
M34 3SG
UK
Tel: 0161 337 9971
Fax: 0161 336 6932
Email: david.tideswell@apolloscientific.co.uk

1.4. Emergency telephone number

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R36/37/38
Classification under CLP: STOT SE 3: H335; Eye Irrit. 2: H319; Skin Irrit. 2: H315

Most important adverse effects: Irritating to eyes, respiratory system and skin.

2.2. Label elements

Label elements under CLP:

Hazard statements:
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

Signal words: Warning

Hazard pictograms: GHS07: Exclamation mark

[cont...]
Precautionary statements:
P261: Avoid breathing vapours.
P271: Use only outdoors or in a well-ventilated area.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Label elements under CHIP:
Hazard symbols: Irritant.
Risk phrases: R36/37/38: Irritating to eyes, respiratory system and skin.
Safety phrases: S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3. Other hazards
PBT: This substance is not identified as a PBT substance.

Section 3: Composition/information on ingredients
3.1. Substances
Chemical identity: ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPANOATE

Section 4: First aid measures
4.1. Description of first aid measures
Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.
Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion: Wash out mouth with water. Consult a doctor.
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed
Skin contact: There may be irritation and redness at the site of contact.
Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

4.3. Indication of any immediate medical attention and special treatment needed
[cont...]
SAFETY DATA SHEET
ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPANOATE

Section 5: Fire-fighting measures

5.1. Extinguishing media
Extinguishing media: Carbon dioxide, dry chemical powder, foam. Suitable extinguishing media for the
surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for fire-fighters
Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact
with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from
downwind. If outside keep bystanders upwind and away from danger point. Mark out the
contaminated area with signs and prevent access to unauthorised personnel. Turn
leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions
Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up
Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for
disposal by an appropriate method.

6.4. Reference to other sections

Section 7: Handling and storage

7.1. Precautions for safe handling
Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air. Only
use in fume hood.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in cool, well ventilated area. Keep container tightly closed. Store under Argon.
Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)
Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

[cont...]
SAFETY DATA SHEET
ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPANOATE

8.1. Control parameters
Workplace exposure limits: Not applicable.

8.2. Exposure controls
Engineering measures: Ensure there is sufficient ventilation of the area.
Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.
Hand protection: Protective gloves.
Eye protection: Safety glasses. Ensure eye bath is to hand.
Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
State: Liquid
Colour: Yellow-red
Odour: Barely perceptible odour
Oxidising: Non-oxidising (by EC criteria)
Solubility in water: negligible
Also soluble in: Acetone. Dichloromethane. Ethyl acetate.
Boiling point/range °C: 121-123@0.6mmHg
Flash point °C: >200

9.2. Other information
Other information: Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity
Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability
Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid
Conditions to avoid: Heat.

10.5. Incompatible materials
Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products
Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.
11.1. Information on toxicological effects

### Relevant hazards for substance:

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>DRM</td>
<td>Based on test data</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>OPT</td>
<td>Based on test data</td>
</tr>
<tr>
<td>STOT-single exposure</td>
<td>INH</td>
<td>Based on test data</td>
</tr>
</tbody>
</table>

#### Symptoms / routes of exposure

- **Skin contact:** There may be irritation and redness at the site of contact.
- **Eye contact:** There may be irritation and redness. The eyes may water profusely.
- **Ingestion:** There may be soreness and redness of the mouth and throat.
- **Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

---

12.1. Toxicity

**Ecotoxicity values:** Not applicable.

12.2. Persistence and degradability

**Persistence and degradability:** No data available.

12.3. Bioaccumulative potential

**Bioaccumulative potential:** No data available.

12.4. Mobility in soil

**Mobility:** No data available.

12.5. Results of PBT and vPvB assessment

**PBT identification:** This substance is not identified as a PBT substance.

12.6. Other adverse effects

**Other adverse effects:** No data available.

---

13.1. Waste treatment methods

- **Disposal operations:** MATERIAL SHOULD BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS
- **Disposal of packaging:** Dispose of as special waste in compliance with local and national regulations. Observe all federal, state and local environmental regulations.
- **NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.
SAFETY DATA SHEET  
ETHYL 3-OXO-3-(PYRIDIN-2-YL)PROPANOATE

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

c=TOXTREE

Phrases used in s.2 and 3: H315: Causes skin irritation.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
R36/37/38: Irritating to eyes, respiratory system and skin.

Legal disclaimer: The material is intended for research purposes only and should be handled exclusively by those who have been fully trained in safety, laboratory and chemical handling procedures. The above information is believed to be correct to the best of our knowledge. The above information is believed to be correct to the best of our knowledge at the date of its publication, but should not be considered to be all inclusive. It should be used only as a guide for safe handling, storage, transportation and disposal. We cannot guarantee that the hazards detailed in this document are the only hazards that exist for this product. This is not a warranty and Apollo Scientific Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.