

## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

Product Description:

**3-Oxo-pyrrolidine-1,2-dicarboxylic acid 1-tert-butyl ester 2-ethyl ester**

Cat No:

ACI-NI-00461

CAS No:

170123-25-8

**Relevant identified uses of the substance or mixture and uses advised against****Recommended Use:** Laboratory Chemicals**Uses advised against:** No information available**Details of the supplier of the safety data sheet****Company**

Advanced Chemical Intermediates Limited

The Old Dairy

Tresplatt

Davidstow

Cornwall

PL32 9YD

Tel: +44 (0) 1840 261451

### 2. HAZARDS IDENTIFICATION

**Classification of the substance or mixture**

REGULATION (EC) No 1272/2008

Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation toxicity – Dusts and mists	Category 4
Skin corrosion/irritation	Category 2
Serious Eye Damage/Eye irritation	Category 2A
Specific target organ systemic toxicity (single exposure)	Category 3

**Label Elements****Signal Word****Warning****Hazard Statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled.

**Precautionary Statements – EU (S28, 1272/2008)**

P261 Avoid breathing dust/fumes/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301+312 IF SWALLOWED: Call a POISON CENTER/ doctor.

**Other Hazards**

No information available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component

3-Oxo-pyrrolidine-1,2-dicarboxylic acid 1-tert-butyl ester 2-ethyl ester

CAS No:

170123-25-8

EC No:

**4. FIRST AID MEASURES**

**Description of first aid measures**

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes, Obtain medical attention

**Skin Contact** wash off immediately with soap and plenty of water removing all contaminated clothes and shoes, Obtain medical attention

**Ingestion** Clean mouth with water, Obtain medical attention

**Inhalation** Remove from exposure, lie down. Move to fresh air if breathing is difficult, give oxygen if not breathing, give artificial respiration, Obtain medical attention

**5. FIRE-FIGHTING MEASURES**

**Extinguishing media**

**Suitable Extinguishing Media**

Water spray Carbon dioxide (CO2) Dry chemical foam

**Extinguishing media which must not be used for safety reasons**

No information available

**Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapours

**Advice for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation

**Environmental precautions**

Prevent further leakage or spillage if safe to do so

**Methods and material for containment and cleaning up**

Sweep up or spillage and collect in suitable container for disposal. Use suitable absorbent if required. Do not let this chemical enter the environment

**7. HANDLING AND STORAGE**

**Precautions for Safe Handling**

Avoid contact with skin and eyes. Do not breath dust. Do not breath vapours or spray mist. Do not ingest

**Conditions for Safe Storage, including and incompatibilities**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters**

**Exposure limits** Not applicable

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available

**Exposure Controls**

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to workstation location.

**Personal Protective Equipment**

- 1. Eye protection** Goggles
- 2. Hand protection** Protective gloves
- 3. Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure
- 4. Respiratory protection** 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.

**Hygiene Measures**

Handle in accordance with good industrial hygiene practice

**Environmental Exposure Controls**

No information available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Colourless, viscous
<b>Boiling Point/Range</b>	
<b>Melting Point/Range</b>	
<b>Flash Point</b>	
<b>Molecular Formula</b>	C12H19NO5
<b>Molecular Weight</b>	257.29

## 10. STABILITY AND REACTIVITY

### Reactivity

#### Chemical Stability

Stable under normal conditions

#### Possibility of Hazardous Reactions

Hazardous Polymerization No information available

Hazardous Reactions No information available

#### Conditions to Avoid

Incompatible products. Heat.

#### Incompatible Materials

Acids, bases, strong oxidizing agents, strong reducing agents,

#### Hazardous Decomposition Products

In combustion emits toxic fumes.

## 11. TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

#### Acute Toxicity

Product Information No acute toxicity information available for product

#### Component Information

#### Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in product

Sensitization No information available

Mutagenic Effects No information available

Reproductive Effects No information available

Developmental Effects No information available

Target Organs No information available

Other Adverse Effects The toxicological properties have not been fully investigated

Endocrine Disruptor Information None known

## 12. ECOLOGICAL INFORMATION

### Toxicity

Eco-toxicity Effects Do not empty into drains

Persistence and Degradability No information available

Bio-accumulative Potential No information available

Mobility in Soil No information available

Other adverse effects No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

Waste from Residues/Unused Products Dispose of in accordance with local regulations

Contaminated Packaging Empty containers should be taken for local recycling, recovery or waste disposal

## 14. TRANSPORT INFORMATION

### IMDG/IMO

Not regulated

### ADR

Not regulated

### IATA

Not regulated

## 15. REGULATORY INFORMATION

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

#### Chemical Safety Assessment

A Chemical safety assessment has not been carried out.

#### International Inventories

## 16. OTHER INFORMATION

Revision Date 27-Feb-2020

Version Number 1.2

Revision Summary Not Applicable

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

### Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.