ACI SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Description: 4-Oxo-pyrrolidine-1,3-dicarboxylic acid 1-benzyl ester 3-ethyl ester

Cat No: ACI-06600 CAS No: 51814-19-8

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 2
Specific target organ systemic toxicity (single exposure)	Category 3

Label Elements



Signal Word Warning

Hazard Statements

H302 - Harmful if swallowed

H315 – Causes skin irritation

H320 - Causes eye irritation

H335 – May cause respiratory irritation

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.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other Hazards

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component: 4-Oxo-pyrrolidine-1,3-dicarboxylic acid 1-benzyl ester 3-ethyl ester

CAS: 51814-19-8

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 breathe dust. Do not breathe vapours or spray mist. Do not ingest

Conditions for Safe Storage, including any 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
 No information available

(PNEC)

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

Eye protection Goggles
 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

Physical State	Solid
Appearance	Off-white low melting solid
Boiling Point/Range	
Melting Point/Range	
Flash Point	
Molecular Formula	C15H17NO5
Molecular Weight	291.31

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

<u>ADR</u>

Not regulated

<u>IATA</u>

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 08/04/2024 Version Number 1.1 Revision Summary Not Applicable

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

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