

Safety Data Sheet

fluorochem.

1. Identification of the substance/mixture

1.1 Product identification

Product name	4-amino-1-methylpyrrolidin-2-one
Other names	
Product code	F309344
CAS	933744-16-2
MDL	MFCD09971175
EINECS	N/A
REACH Registration number	

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

Relevant uses	For research and development purposes.
Uses advised against	No uses advised.

1.3 Safety Data Sheet supplier details

Company	Fluorochem Ltd
Address	Unit 14, Graphite Way Hadfield Glossop Derbys. SK13 1QH United Kingdom
Telephone	+44 1457 860111
Email	sds@fluorochem.co.uk

1.4 Emergency Telephone

Emergency Telephone	+44 20 3807 3798 (Poison Information)
---------------------	---------------------------------------

2. Hazard Identification

2.1 Classification of the substance or mixture

Classification	H302 Acute Tox. 4 H317 Skin Sens. 1
----------------	--

2.2 Label Elements

Signal Word

Warning

Pictograms



GHS07

Hazards

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

Precautions

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P362+P364 Take off contaminated clothing and wash it before reuse.

P272 Contaminated work clothing should not be allowed out of the workplace.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see Section 4 on this SDS).

P270 Do not eat, drink or smoke when using this product.

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

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

P264 Wash hands thoroughly after handling.

P330 Rinse mouth.

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

2.3 Other Hazards

Other Classification Hazards

3. Composition

3.1 SUBSTANCE

Name	CAS	Einecs	Composition	Hazards
4-amino-1-methylpyrrolidin-2-one	933744-16-2	N/A		

3.2 MIXTURE

Not applicable. Product is a substance.

4. First Aid Measures

4.1 Description of First Aid Measures

Eye Contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing and seek medical attention.

Ingestion

If swallowed rinse the mouth with plenty of water (only if the person is conscious) and contact a poison centre or

physician if you feel unwell.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a poison centre or physician if you feel unwell. If breathing is irregular or stopped, administer artificial respiration.

Skin Contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated clothing immediately. In case of skin reactions, consult a physician.

General Advice

No additional advice.

4.2 Most Important Symptoms and Effects

Most Important Symptoms and Effects

No known symptoms or effects.

4.3 Indication of any urgent medical attention and special treatments needed

Immediate First Aid Measures

No special immediate treatment required.

5. Fire Fighting Measures

5.1 Extinguishing Media

Suitable Fire Extinguishing Media

Carbon dioxide, alcohol resistant foam or dry chemical powder., Use water to extinguish fire.

Unsuitable Fire Extinguishing Media

No known unsuitable media.

5.2 Special hazards arising from the substance or mixture

Special Hazards

Thermal decomposition can lead to release of irritating gases and vapours.

5.3 Recommendations for firefighting personnel

Advice for Fire Fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Keep personnel away from spill/leak.

6.2 Environmental Precautions

Environmental Precautions

Prevent further leakage if safe to do so. Prevent product from entering drains. Do not let product enter waterways or sewer systems. Discharge into the environment must be avoided.

6.3 Containment and cleaning methods and materials

Containment - Methods and Materials

Absorb the spilled material with an inert absorbent (e.g. sand, silica gel, rag, vermiculite) before transferring into

an airtight container. Remove all sources of ignition.
Dispose of appropriately according to local regulations.

6.4 References to other sections

Referenced SDS Sections

For personal protection see section 8. For disposal see section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Safe Handling

Wear appropriate personal protective equipment. Use only under a chemical fume hood. Keep away from heat/sparks/open flame/hot surfaces. Take measures to prevent the build-up of electrostatic charge. Ensure adequate exhaust ventilation, especially if dust, aerosol or fumes will be generated. Avoid contact with skin, eyes and clothing. For precautions see section 2.2.

Protection Against Explosion and Fire

Where possible, use anti static and spark proof equipment when handling.

General Occupational Hygiene

Handle in accordance with good industrial hygiene and safety practice. Wash hands before and after use. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use.

7.2 Conditions for Safe Storage and Incompatibilities

Managing Storage Risks

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

Storage Controls

No special requirements.

Maintaining Integrity

Keep container tightly closed in a cool area away from sunlight or heat sources.

Other Advice

No other specific advice available.

7.3 Specific End Use(s)

Specific End Use(s)

No specific end uses are advised. The products supplied are for research purposes only.

8. Exposure Controls / Personal Protection

8.1 Control Parameters

Control Parameters

No data available.

8.2 Exposure Controls

Engineering Measures

Use only under a chemical fume hood ensuring adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Face Protection	Wear tightly fitting safety goggles which adhere to European standard EN 166. Ensure eye bath is to hand.
Hand Protection	Handle with impermeable gloves. Inspect gloves before use. Gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Skin Protection	Wear appropriate protective clothing ensuring all skin is covered. Wear safety shoes that meet at least S1 standards. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory Protection	Product should be handled in a fume cupboard with adequate extraction. No respiratory equipment is needed under normal use conditions.
Hygiene Measures	Ensure hair or skin particles cannot enter the chemical container.
Environment Exposure Controls	Avoid discharge into the environment, see section 6.2.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

a) State	Solid
b) Colour	No data available.
c) Odour	No data available.
d) Melting Point / Freezing Point	No data available.
e) Initial Boiling point or Boiling range	No data available.
f) Flammability	No data available.
g) Upper / Lower Flammability or Explosion Limits	No data available.
h) Flash Point	No data available.
i) Auto Ignition Temperature	No data available.
j) Decomposition Temperature	No data available.
k) pH	No data available.
l) Viscosity	No data available.
m) Solubility	No data available.
n) Partition Coefficient	No data available.
o) Vapour Pressure	No data available.
p) Relative Density	No data available.
q) Vapour Density	No data available.
r) Appearance	Solid

9.2 Other Safety Information

Other Information

No data available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity

No known reactivity, based on information available.

10.2 Stability

Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

Possibility of Hazardous Reactions

None under normal storage conditions.

10.4 Conditions to Avoid

Conditions to Avoid

Heat, sparks, open flames, sources of ignition. Exposure to moisture.

10.5 Incompatible Materials

Incompatible Materials

Strong oxidizing agents.

10.6 Hazardous Decomposition Products

Hazardous Decomposition Products

No data available.

11. Toxicology Information

11.1 Information on Hazard Classes, as defined in Regulation (EC) No. 1271/2008

Acute Toxicity

No toxicological data available for this product.

Skin Corrosion / Irritation

No Toxicology data available for this product.

Serious Eye Damage / Irritation

No Toxicology data available for this product.

Respiratory or Skin Sensitisation

May cause an allergic skin reaction.

Germ Cell Mutagenicity

No Toxicology data available for this product.

Carcinogenicity

No Toxicology data available for this product.

Reproductive Toxicity

No Toxicology data available for this product.

STOT-single Exposure

No Toxicology data available for this product.

STOT-repeated Exposure

No Toxicology data available for this product.

Aspiration Hazard

No Toxicology data available for this product.

11.2 Information about Other Hazards

Endocrine Disrupting Properties

No Ecological data available for this product.

Addition Toxicology Information

No Toxicology data available for this product.

12. Ecological Information

12.1 Toxicity

Toxicity	No Ecological data available for this product.
----------	--

12.2 Persistence and Degradability

Persistence and Degradability	No Ecological data available for this product.
-------------------------------	--

12.3 Bio-Accumulative Potential

Bio-Accumulative Potential	No Ecological data available for this product.
----------------------------	--

12.4 Mobility in Soil

Mobility in Soil	No Ecological data available for this product.
------------------	--

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	No Ecological data available for this product.
------------------------------------	--

12.6 Endocrine Disrupting Properties

Endocrine Disrupting Properties	No Ecological data available for this product.
---------------------------------	--

12.7 Other Adverse Effects

Other Adverse Effects	Avoid release to the environment.
-----------------------	-----------------------------------

13. Disposal Considerations

13.1 Waste Treatment Methods

Disposal Operations	Ensure product is disposed of by licensed waste carriers.
Disposal of Packaging	Ensure INNER PACKAGING is disposed of by licensed waste carriers. Some OUTER PACKAGING MAY be recyclable if not contaminated.

14. Transport Information

14.1 UN Number

IATA UN Number	No data available.	ADR UN Number	No data available.	IMDG UN Number	No data available.
----------------	--------------------	---------------	--------------------	----------------	--------------------

14.2 Official UN Shipping Name

IATA Proper Shipping Name	(4-amino-1-methylpyrrolidin-2-one)	ADR Proper Shipping Name	Non Hazardous For Transport (4-amino-1-methylpyrrolidin-2-one)	IMDG Proper Shipping Name	(4-amino-1-methylpyrrolidin-2-one)
---------------------------	------------------------------------	--------------------------	--	---------------------------	------------------------------------

14.3 Hazard classes for transport purposes

IATA Hazard

Class	No data available.	ADR Hazard Class	No data available.	IMDG Hazard Class	No data available.
--------------	--------------------	-------------------------	--------------------	--------------------------	--------------------

14.4 Packing Group

IATA Packing Group	No data available.	ADR Packing Group	No data available.	IMDG Packing Group	No data available.
---------------------------	--------------------	--------------------------	--------------------	---------------------------	--------------------

14.5 Enviromental Hazards

IATA Environmental Hazards	No data available.	ADR Environmental Hazards	No data available.	IMDG Environmental Hazards	No data available.
-----------------------------------	--------------------	----------------------------------	--------------------	-----------------------------------	--------------------

14.6 Special Precautions

No Information Available

14.7 Bulk Maritime Transport in accordance with IMO Instructions

IATA Sub Class	No data available.	ADR Sub Class	No data available.	IMDG Sub Class	No data available.
-----------------------	--------------------	----------------------	--------------------	-----------------------	--------------------

15. Regulatory Information

15.1 Health, safety and environmental regulations/legislation specific to the substance or mixture

Regulatory Information	As far as Fluorochem is aware, there are no further regulations controlling this product.
-------------------------------	---

15.2 Chemical Safety Assessment

Chemical Safety Assessment There is no chemical safety assessment available for this product.

16. Other Information

Information Not Covered in Other Sections

Information Not Covered in Other Sections	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road (European agreement on the international transport of dangerous goods by road). RID: International Regulations concerning the Transport of Dangerous Goods by Rail (Regulations regarding the international transport of dangerous goods by rail). IMDG: International Maritime Code for Dangerous Goods. IATA: International Air Transport Association. IATA-DGR: Dangerous Goods Regulations fra International Air Transport Association. ICAO: International Civil Aviation Organisation. ICAO-TI: Technical instructions from ICAO. GHS: Globally Harmonized System for Classification and Labelling of Chemicals. CAS: Chemical Abstracts Service
--	---

Other Information

Revision	1
Date Modified	19/12/2024 18:46:00
Disclaimer	The product listed is for research and development purposes only and

not for human or animal use. As such, in most cases, the toxicological, ecological and physicochemical properties have not been fully determined and the product should be treated with respect and always handled under suitable conditions by appropriately qualified personnel. The responsible party shall use this datasheet only in conjunction with other sources of information gathered by them, and should make an independent judgement of suitability, to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this material safety data sheet, or in combination with any other product or process, is the responsibility of the user. This SDS adheres to Regulation (EC) No 1907/2006, and as of 13th April 2023, also conforms to EU Regulation 2020/878.