



SAFETY DATA SHEET

Generic SDS (EU) - No country specific data

Version 3.8. Revision Date 06.02.2015

Issued on 2022.11.20

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name:	4,4-difluoro-2-methylpyrrolidine hydrochloride
Product Catalogue Number:	EN300-6478187
EC number:	N/A
REACH No.:	A registration number for this substance / mixture is not available. The substance is exempted from registration as the annual tonnage does not require a registration or registration is envisaged for a later registration deadline.

CAS-No.:	1781074-90-5
----------	--------------

Alias product code(s): N/A

1.2 Recommended use of the substance and restrictions on use

Recommended use: Laboratory chemicals, research and development use only.

1.3 Supplier's details

Company:	ENAMINE Ltd.78 Chervonotkatska Street02094 KyivUkraine
Telephone:	+38 044 495 88 17
Fax:	+380 44 5373253
E-mail address:	SDS@enamine.net

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance / mixture

Classification according to Regulation (EC) No 1272/2008

Skin corrosion/irritation(Category 2), H315

Serious eye damage/eye irritation(Category 2), H319

Specific target organ toxicity, single exposure; Respiratory tract irritation(Category 3), H335

Sensitisation, Skin(Category 1), H317

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Pictogram:



Signal word: Warning

Hazard statement(s):

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H317 May cause an allergic skin reaction

Precautionary statements:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling. Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352 IF ON SKIN: wash with plenty of soap and water.
- P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position 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.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P332+P313 IF SKIN irritation occurs: Get medical advice/attention.
- P337+P313 IF eye irritation persists: Get medical advice/attention.
- P362 Take off contaminated clothing and wash before reuse.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

N/A

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms:	N/A
Formula:	C5H10ClF2N
Molecular Weight:	157.5894

CAS-No.:	1781074-90-5
EC number	N/A

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component: 4,4-difluoro-2-methylpyrrolidine hydrochloride

Classification:

Skin corrosion/irritation (Category 2), H315
Serious eye damage/eye irritation (Category 2), H319
Specific target organ toxicity, single exposure; Respiratory tract irritation (Category 3), H335
Sensitisation, Skin (Category 1), H317

Concentration, %: N/A

For the full text of the H-Statements mentioned in this Section, see Section 2.2.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention immediately.

Skin contact: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

Eye contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Suitable extinguishing media

Sand, carbon dioxide, dry chemical powder, or appropriate foam.

5.2 Specific hazards arising from the substance or mixture

May emit toxic fumes under fire conditions including Carbon monoxide, Carbon dioxide, Hydrogen chloride, Hydrogen fluoride, Nitrogen oxides.

5.3 Special protective equipment and precautions for firefighters

Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: remove movable containers if safe to do so.

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Wipe dry, place a rag in a bag and hold for waste disposal. Avoid fumes inhaling. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling is performed in a well ventilated place. Wear suitable protective equipment. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Wash hands and face thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and upright. Avoid overheating. Store in a dry and well-ventilated place at +4°C.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

N/A

8.2 Appropriate engineering controls

Install a closed system or local exhaust so that workers should not be exposed directly.

Install safety shower and eye bath.

Wash hands thoroughly after handling.

8.3 Personal protective equipment

Respiratory Protection: Government approved respirator.

Skin Protection: Compatible chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.

Eye/Face Protection: Government approved eye/face protection equipment.

Body protection: Protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Property Value At Temperature or Pressure	
Appearance (20°C)	
Physical state:	powder
Odour:	N/A
Colour:	brown
pH:	N/A
Melting point/freezing point (°C):	N/A
Initial boiling point and boiling point range (°C):	N/A
Flash Point (°C):	N/A
Vapour pressure:	N/A
Vapour density:	N/A
Relative density (g/ml):	
Partition coefficient: n-octanol/water:	1.181
Auto-ignition temperature (°C):	N/A
Viscosity:	N/A
Flammability:	N/A
Explosive properties:	N/A
Oxidizing properties:	N/A
Water solubility:	N/A
Evaporation rate:	N/A
Refractive index:	N/A

10. STABILITY AND REACTIVITY

10.1 Chemical stability

Stable under specified storage temperature. Compound is known to be hygroscopic – keep in a well-sealed container.

10.2 Possibility of hazardous reactions

No data available

10.3 Conditions to avoid

No data available

10.4 Incompatible materials

Strong oxidizing agents.

10.5 Hazardous decomposition products

Carbon monoxide, Carbon dioxide, Hydrogen chloride, Hydrogen fluoride, Nitrogen oxides

11. TOXICOLOGICAL INFORMATION

N/A

Toxicological properties were not fully evaluated.

12. ECOLOGICAL INFORMATION

N/A

13. DISPOSAL CONSIDERATIONS

Substance disposal:	Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations
Contaminated packaging disposal:	Dispose of as unused product

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards

ADR/RID: no

IMDG: no

IATA: no

14.6 Special precautions for user

No data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulations (EC) No. 1907/2006 and No. 1272/2008.

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

No data available

15.2 Chemical Safety Assessment

For this product no chemical safety assessment was carried out at Enamine Ltd.

16. OTHER INFORMATION

Further information

For R&D use only. Not for drug, household or other uses.

This is an experimental product whose properties are not fully evaluated yet. The information contained herein is based on the present state of our knowledge and therefore does not guarantee certain properties. Recipients of the product must take responsibility for observing existing laws and regulations.

End of Safety Data Sheet