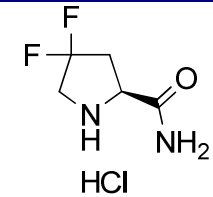



# MATERIAL SAFETY DATA SHEET

07/09/2010

## 1- PRODUCT & COMPANY INFORMATION

Product Name	4,4-Difluoro-L-Prolinamide Hydrochloride	 HCl
Catalog Number	OC-0031	
Company	OmegaChem inc. 480 rue Perreault Saint-Romuald (Quebec) Canada G6W 7V6 Tel. (418) 837-4444 Fax (418) 837-5196 <a href="mailto:info@omegachem.com">info@omegachem.com</a> <a href="http://www.omegachem.com">www.omegachem.com</a>	

## 2 – COMPOSITION / INGREDIENTS

Substance Name	4,4-Difluoro-L-Prolinamide Hydrochloride		
CAS Number	SARA 313	Formula	
426844-51-1	N/A	C <sub>5</sub> H <sub>9</sub> ClF <sub>2</sub> N <sub>2</sub> O	

## 3 – HAZARDS IDENTIFICATION

See section 11 for additional information on toxicity.

## 4 – FIRST AID

Oral exposure	If swallowed, wash mouth with water, provided the person is conscious and call a physician.
Inhalation exposure	Remove the person to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Dermal exposure	Immediately wash skin with soap and large amounts of water.
Eye exposure	Flush eyes with large amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## 5 – FIRE FIGHTING MEASURES

Flash point	Autoignition temperature	Flammability
N/A	N/A	N/A
Extinguishing media	Water spray; carbon dioxide; dry chemical powder or appropriate foam.	
Firefighting	<b>Protective equipment:</b> Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. <b>Specific hazard(s):</b> Emits toxic fumes under fire conditions.	

## 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
Method for cleaning up	Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.
Procedure in case of leak or spill	N/A

**7 – HANDLING AND STORAGE**

Handling	User exposure: avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Storage	

**8 – EXPOSURE CONTROLS / PPE**

Engineering controls	Safety shower and eye bath. Mechanical exhaust required.
Personal protective equipment	<b>Respiratory:</b> government approved respirator. <b>Hand:</b> rubber gloves. <b>Eye:</b> chemical safety goggles.
General hygiene measures	Wash thoroughly after handling. Wash contaminated clothing before reuse.

**9 – PHYSICAL / CHEMICAL PROPERTIES**

Appearance	White solid		
Molecular Weight	186.59 AMU	Evaporation rate	N/A
pH	N/A	Viscosity	N/A
Boiling point	N/A	Surface tension	N/A
Melting point	221°C (dec)	Partition coefficient	N/A
Freezing point	N/A	Decomposition temp.	N/A
Vapor pressure	N/A	Flash point	N/A
Vapor density	N/A	Explosion limits	N/A
Saturated Vapor Conc.	N/A	Flammability	N/A
SG / Density	N/A	Autoignition temp.	N/A
Odor threshold	N/A	Refractive index	N/A
Volatile	N/A	Optical rotation	-30.6°, c = 1, H <sub>2</sub> O
VOC content	N/A	Solubility	
Water content	N/A	Miscellaneous	
Solvent content	N/A	N/A = not available	

**10 – STABILITY AND REACTIVITY**

Stability	<b>Materials to Avoid:</b> strong oxidizing agents. <b>Conditions of Instability:</b> N/A
Hazardous decomposition products	Carbon monoxide Carbon dioxide Nitrogen oxides Hydrogen fluoride Hydrogen chloride gas

**11-TOXICOLOGICAL INFORMATION**

<b>Route of exposure</b>	
<b>Skin contact</b>	May causes skin irritation.
<b>Skin absorption</b>	May be harmful if absorbed through the skin
<b>Eye</b>	May causes eye irritation.
<b>Inhalation</b>	Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
<b>Ingestion</b>	May be harmful if swallowed.
<b>Signs and symptoms of exposure</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**12 – ECOLOGICAL INFORMATION**

N/A

**13 – DISPOSAL CONSIDERATIONS**

<b>Appropriate method of disposal of substance or preparation</b>	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.
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**14 – TRANSPORT INFORMATION**

<b>DOT</b>	N/A
<b>IATA</b>	N/A

**15 – REGULATORY INFORMATION**

<b>EU</b>	N/A
<b>USA</b>	N/A
<b>Canada</b>	N/A

**16 – OTHER INFORMATION**

The product is to be used for R&D only. Not for drug, household or other uses.  
 The above information is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety measures. It is believed to be correct but does not purport to be inclusive and shall be used only as a guide.  
 OmegaChem Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.