1. Identification of Substance/ Identification of Company

**Product:** Fmoc-D-Phe(3-F)-OH  
**Catalog #:** UFF242  
**Chemical Formula:** C_{24}H_{20}FNO_{2}  
**Synonyms:** N-Fmoc-3-fluoro-D-phenylalanine

**Supplier:** AAPPTec, LLC  
6309 Shepherdsville Road  
Louisville, Kentucky USA  
40228  
Telephone: 502-968-2223  
Fax: 502-968-3338

2. Hazards Identification

**OSHA hazards:** No known OSHA hazards

**Potential health effects:**
- **Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin:** May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes:** May cause eye irritation.
- **Ingestion:** May be harmful if swallowed

3. Composition/ information on ingredients

**Substance/preparation:** Substance  
**Chemical Name:** N-Fmoc-3-fluoro-D-phenylalanine  
**CAS #:** 198545-72-1  
**EC #:** Not available

4. First Aid Measures

**First Aid Measures**

- **General:** Consult a physician. Show this safety date sheet to the doctor in attendance. Move out of dangerous area.
- **Inhalation:** If inhaled, move person to fresh air. If not breathing, give artificial respiration.
- **Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water.
- **Skin Contact:** Wash off with soap and plenty of water.
- **Eye Contact:** Flush eyes with water as a precaution.
5. **Fire-fighting Measures**

Flammability of Product
- **Flash Point:** No data available
- **Ignition Temperature:** No data available

Extinguishing Media (Small Fire): Use a carbon dioxide or dry chemical extinguisher.

Extinguishing Media (Large Fire): Use water spray, fog, or foam. Do not use water jet.

Hazardous thermal decomposition products: Oxides of carbon (CO, CO$_2$), and nitrogen (NO, NO$_2$, …), hydrogen fluoride gas (HF).

Special fire-fighting procedures: Firefighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Protection of fire-fighters: Use an approved/certified respirator or equivalent.

Other Information: Prevent fire-fighting water from entering ground water or surface water.

6. **Accidental Release Measures**

Personal Precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Small Spill or Leak: Sweep up and place in a suitable container for disposal according to local regulations.

Large Spill or Leak: Sweep up and shovel into suitable containers for disposal according to local regulations. Do not allow product to enter drains.

7. **Handling and Storage**

Handling: Avoid contact with skin and eyes. Avoid forming dust and aerosols. Provide appropriate exhaust ventilation in places where dust is formed. Normal measures for preventive fire protection.

Storage: Keep container tightly closed. Keep dry in a well ventilated place.

8. **Exposure Controls/Personal Protection**

Exposure Limits
Contains no substances with occupational exposure limit values.

**Engineering Measures:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume, or mist use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protective Equipment**
- **Respiratory:** Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks.
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin and Body**: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hands**: Handle with gloves

**Eyes**: Safety glasses with side shields conforming to EN166.

**Hygiene Measures**: Wash hands after handling and before eating, smoking, using lavatory, and end of the day. Change contaminated clothing immediately.

9. **Physical and Chemical Properties**

   **Physical State**: Crystalline
   **Color**: White to off-white
   **Molecular Weight**: 405.42
   **Melting Point**: No data available
   **Boiling Point**: No data available
   **Flash Point**: No data available
   **Ignition Temperature**: No data available

   **Explosive Properties**
   - Risk of explosion by mechanical impact: No data available
   - Risk of explosion by static discharge: No data available

   **Water Solubility**: No data available

10. **Stability and Reactivity**

   **Stability**: Stable under recommended storage conditions.
   **Materials to Avoid**: Strong oxidizing reagents, Strong acids.
   **Hazardous Decomposition Products**: Oxides of carbon (CO, CO₂) and nitrogen (NO, NO₂, …), hydrogen fluoride gas (HF).

11. **Toxicological Information**

   **Acute Toxicity**: No data available
   **Chronic Toxicity**: No data available
   **Irritation and Corrosion**: No data available
   **Sensitization**: No data available
   **Carcinogenic Effects**: No data available
   **Mutagenic Effects**: No data available
   **Reproductive Toxicity**: No data available
   **Teratogenic Effects**: No data available
   **Signs and Symptoms of Exposure**: Weakness, Convulsions.

   **Potential Health Effects**
   - **Inhalation**: May be harmful if inhaled. May cause respiratory tract irritation.
   - **Skin**: May be harmful if absorbed through skin. May cause skin irritation.
   - **Eyes**: May cause eye irritation.
   - **Ingestion**: May be harmful if swallowed
12. Ecological Information

Toxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
PBT and PvBv assessment: No data available
Other adverse effects: No data available

13. Disposal Considerations

Methods of Disposal of Waste Residues and Contaminated Packaging: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transportation

International Transport Regulations
DOT
Not hazardous goods

IMDG
Not hazardous goods

IATA
Not hazardous goods

15. Regulatory Information

U.S. Federal Regulations
OSHA Hazards: No known OSHA hazards
SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313
SARA 311/312 Hazards: No SARA hazards

State Regulations:
Massachusetts Right To Know Components: No components listed.

Pennsylvania Right To Know Components:
N-Fmoc-3-fluoro-D-phenylalanine
CAS No: 198545-72-1
Revision Date:

New Jersey Right To Know Components:
N-Fmoc-3-fluoro-D-phenylalanine
CAS No: 198545-72-1
Revision Date:

California Prop. 65 Components:
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
DSL Status: This product contains the following components that are not on the Canadian DSL nor NDSL lists.
N-Fmoc-3-fluoro-D-phenylalanine
CAS No: 198545-72-1

16. Other Information

Hazardous Material Information System (U.S.A.)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td></td>
</tr>
</tbody>
</table>

National Fire Protection Association (U.S.A.)

Notice to Reader

To the best of aapptec's knowledge, the information contained in this data sheet is accurate. However, neither aapptec nor any of its distributors assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Any material may present unknown hazards and should be used with caution. Final determination of suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, aapptec cannot guarantee that these are the only hazards that exist.

Date of Issue: 30May, 2013