

## 1. Identification of Substance/ Identification of Company

**Product:** Fmoc-Arg(Boc)<sub>2</sub>-OH  
**Catalog #:** AFR131  
**Chemical Formula:** C<sub>31</sub>H<sub>40</sub>N<sub>4</sub>O<sub>8</sub>  
**Molecular Weight:** 596.7 g/mol  
**Synonyms:** N $\alpha$ -Fmoc-N $\omega$ ,N $\omega$ -bis-Boc-L-arginine

**Supplier:** AAPPTec, LLC  
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Louisville, Kentucky USA  
40228  
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## 2. Hazards Identification

**Classification of the substance or mixture:** Not a hazardous substance or mixture  
**GHS Label Elements, Including Precautionary Statements:** Not a hazardous substance or mixture  
**Hazards Not Otherwise Classified (HNOC) or not covered by GHS:** None

## 3. Composition/ information on ingredients

**Substance/preparation:** Substance  
**Chemical Name:** N $\alpha$ -Fmoc-N $\omega$ ,N $\omega$ -bis-Boc-L-arginine  
**CAS #:** 143824-77-5  
**EC #:** Not available

## 4. First Aid Measures

### First Aid Measures

**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:** Check for and remove any contact lenses. Flush eyes with water as a precaution.

### Effects and Symptoms

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.  
**Ingestion:** May be harmful if swallowed.  
**Skin Contact:** May be harmful if absorbed through skin. May cause skin irritation.

**Eye contact:** May cause eye irritation

**Aggravating conditions:** Repeated or prolonged exposure is not known to aggravate medical condition.

## 5. Fire-fighting Measures

**Flammability of Product:** 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<sub>2</sub>) and nitrogen (NO, NO<sub>2</sub>, ...).

**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.

## 6. Accidental Release Measures

**Personal Precautions:** Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient, consult a specialist before handling this product.

**Small Spill or Leak:** Use appropriate tools to put spilled material into a convenient waste disposal container.

**Large Spill or Leak:** Use a shovel to put the spilled material into a convenient waste disposal container.

## 7. Handling and Storage

**Handling:** Keep away from heat. Keep away from sources of ignition. Do not breath dust.

**Storage:** Keep container tightly closed. Do not store above 5°C (41°F).

## 8. Exposure Controls/Personal Protection

**Appropriate Engineering Controls:** General industrial hygiene practice.

### Personal Protective Equipment

**Eye/Face Protection:** Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

**Skin Protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching the glove's outer

surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with local laws and good laboratory practices. Wash and dry hands.

**Body:** Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

**Respiratory Protection:** Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks.

**Control of Environment Exposure:** No special environmental precautions required.

## 9. Physical and Chemical Properties

**Appearance:** White to off-white solid

**Odor:** No data available

**Odor Threshold:** No data available

**pH:** No data available

**Melting Point:** No data available

**Boiling Point:** No data available

**Flash Point:** No data available

**Evaporation Rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/Lower Flammability or Explosive Limits:** No data available

**Vapor Pressure:** No data available

**Vapor Density:** No data available

**Relative Density:** No data available

**Water Solubility:** No data available

**Partition Coefficient n-Octanol/Water:** No data available

**Auto-Ignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** No data available

**Explosive Properties:** No data available

**Oxidizing Properties:** No data available

**Other Safety Information:** No data available

## 10. Stability and Reactivity

**Reactivity:** No data available

**Chemical Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** No data available

**Conditions to Avoid:** No data available

**Hazardous Decomposition Products:** Oxides of carbon (CO, CO<sub>2</sub>) and nitrogen (NO, NO<sub>2</sub>, ...).

## 11. Toxicological Information

**RTECS #:** Not available

**Acute Toxicology:** No data available

**Skin Corrosion/Irritation:** No data available

**Serious Eye Damage/Eye Irritation:** No data available

**Respiratory or Skin Sensitization:** No data available

**Germ Cell Mutagenicity:** No data available

**Carcinogenicity**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive Toxicity:** No data available

**Specific Target Organ Toxicity – Single Exposure:** No data available

**Specific Target Organ Toxicity – Repeated Exposure:** No data available

**Aspiration Hazard:** No data available

**Additional Information:** To the best of our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

## 12. Ecological Information

**Toxicity:** No data available

**Persistence and Degradation:** No data available

**Bioaccumulative Potential:** No data available

**Mobility in Soil:** No data available

**Results of PBT and vPvB Assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other Adverse Effects:** No data available

## 13. Disposal Considerations

**Methods of Disposal,**

**Waste Residues,**

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

## 14. Transportation

**DOT:** Not dangerous goods

**IMDG:** Not dangerous goods

**IATA:** Not dangerous goods

## 15. Regulatory Information

**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.

**State Regulations:**

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right To Know Act.

**Pennsylvania Right To Know Components**

N $\alpha$ -Fmoc-N $\omega$ ,N $\omega$ -bis-Boc-L-arginine  
CAS No.: 143824-77-5

**New Jersey Right To Know Components**

N $\alpha$ -Fmoc-N $\omega$ ,N $\omega$ -bis-Boc-L-arginine  
CAS No.: 143824-77-5

**California Prop. 65 Components**

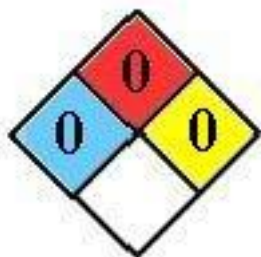
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. Other Information**

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

Health	0
Flammability	0
Physical Hazard	0
Chronic Health Hazard	

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



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