

## Safety Data Sheet


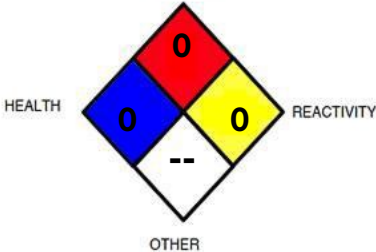
### Section 1: Product & Company Identification

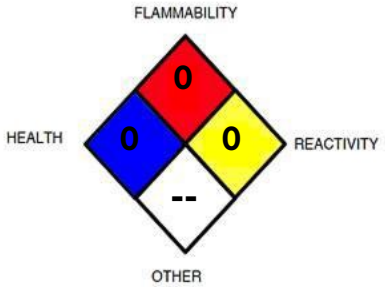
<b>Product Name:</b>	Phosphoramidon
<b>Product #:</b>	P-1101
<b>Synonyms:</b>	Phosphoramidon sodium salt; N-( $\alpha$ -Rhamno-pyranosyl-oxy-hydroxy-phosphinyl)-Leu-Trp disodium salt; N-( $\alpha$ -Rhamno-pyranosyl-phos-phono)-L-leucyl-L-tryptophan disodium salt
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Phosphoramidon	119942-99-3	-	$\geq 97$

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">OTHER</p>

<b>NFPA Classification</b>	 <p style="text-align: center;">FLAMMABILITY HEALTH      REACTIVITY OTHER</p>
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## Section 4: First Aid Measures

<b>General Overview:</b>	If symptoms persist, call a physician.
<b>Inhalation:</b>	Remove to fresh air If symptoms persist, call a physician Artificial respiration and/or oxygen may be necessary Call a physician Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors.
<b>Skin:</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Eyes:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.
<b>Ingestion:</b>	Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	No data available
<b>Extinguishing Media:</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Hazardous thermal (de)composition products:</b>	Carbon oxides. Nitrogen oxides (NO <sub>x</sub> ).
<b>Special Fire Fighting Procedures:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Flash Point:</b>	No data available

## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
<b>Environmental Precautions:</b>	Prevent entry into waterways, sewers, basements, or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.
<b>Methods for Clean-up:</b>	Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Store at -20°C.
<b>Handling:</b>	Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.</p>
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<b>Skin and Body:</b>	  <p>Wear protective gloves and protective clothing.</p>
<b>Eyes:</b>	 <p>Tight sealing safety goggles. Face protection shield.</p>
<b>Ventilation/Engineering Measures:</b>	Showers, Eyewash stations, Ventilation systems
<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Other:</b>	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	White powder, characteristic odor
<b>Formula</b>	$C_{23}H_{32}N_3O_{10}P \cdot 2Na$
<b>Molecular Wt.</b>	587.47
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	Water, DMSO, methanol
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon oxides, Nitrogen oxides (NOx)
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	Extremes of temperature and direct sunlight

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	No data available
<b>ACUTE Toxicity:</b>	No data available
<b>CHRONIC Toxicity:</b>	No data available
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	May cause long lasting harmful effects to aquatic life.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

### SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Disposal should be in accordance with applicable regional, national, and local laws and regulations.
<b>Contaminated Packaging:</b>	Do not reuse container.

### SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not regulated
<b>DOT regulations:</b>	Not regulated
<b>IMDG/IMO (SEA):</b>	Not regulated
<b>IATA/DGR (AIR):</b>	Not regulated
<b>Special Provisions:</b>	N/A

### SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H319 Causes serious eye irritation H335 May cause respiratory irritation
<b>Risk Phrases:</b>	P264 Wash face, hands and any exposed skin thoroughly after handling P280 Wear protective gloves/protective clothing/eye protection/face protection P261 Avoid breathing dust/fume/gas/mist/vapors/spray P71 Use only outdoors or in a well-ventilated area
<b>Safety Phrases:</b>	P307+P313 IF exposed or concerned: Get medical advice/attention P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P337+P313 If eye irritation persists: Get medical advice/attention P304+P341 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing P312 Call a POISON CENTER or doctor/physician if you feel unwell
<b>EU Regulations:</b>	P403+P233 Store in a well-ventilated place. Keep container tightly closed P405 Store locked up P501 Dispose of contents/container to an approved waste disposal plant
<b>US Regulations:</b>	TSCA: No products were listed California Proposition 65: No products were listed
<b>U.S. Federal Regulations:</b>	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Acute Health Hazard SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found.

	<p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: No products were found.</p>
<b>WHMIS (Canada):</b>	N/A

## **SECTION 16: Other Information**

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*