

Safety Data Sheet

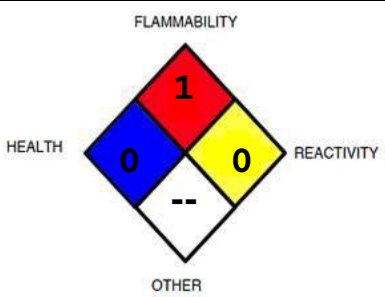
Section 1: Product & Company Identification

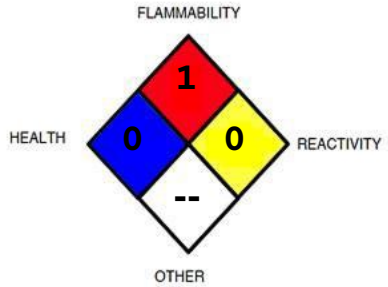
Product Name:	Bestatin HCl
Product #:	B-1075
Synonyms:	Ubenimex hydrochloride; N-[(2S,3R)-3-Amino-2-hydroxy-4-phenylbutyryl]-Lleucinehydrochloride
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Bestatin HCl	65391-42-6	-	100

Section 3: Hazards Identification

Symbols	N/A
HMIS Classification	<p style="text-align: center;">FLAMMABILITY</p>  <p style="text-align: center;">HEALTH REACTIVITY</p> <p style="text-align: center;">OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist /vapors/spray. Do not get in eyes, on skin, or on clothing.
Inhalation:	Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Artificial respiration and/or oxygen may be necessary Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician
Skin:	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Immediate medical attention is not required.
Eyes:	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. If symptoms persist, call a physician.
Ingestion:	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. 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

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


Section 6: Accidental Release Measures




Personal Precautions:	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental Precautions:	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.
Methods for Clean-up:	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

Storage:	Keep container tightly closed in a dry and well-ventilated place. 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.
Handling:	Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink, or smoke when using this product. Use with local exhaust ventilation. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <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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Skin and Body:	  <p>Wear protective gloves and protective clothing.</p>
Eyes:	 <p>Tight sealing safety goggles. Face protection shield.</p>
Ventilation/Engineering Measures:	Showers, Eyewash stations, Ventilation systems
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	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

Appearance & Odor:	White powder
Formula	$C_{16}H_{24}N_2O_4 \cdot HCl$
Molecular Wt.	344.8
Melting Pt.	216°C
Boiling Pt.	No data available
Density:	No data available
Vapor Pressure:	No data available
Evaporation Rate:	No data available
Vapor Density:	No data available
Solubility:	Water (25 g/L)
Flash Point:	No data available
Autoignition Temp:	No data available

SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous decomposition products:	Carbon oxides. Nitrogen oxides (NO _x). Phosgene.
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	Extremes of temperature and direct sunlight.

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	No data available
CHRONIC Toxicity:	No data available
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<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

Ecotoxicity:	May cause long lasting harmful effects to aquatic life.
Mobility:	No data available
Persistence and degradability:	No data available
Bioaccumulative potential:	No data available
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	Do not allow undiluted product or large quantities of it to reach groundwater or sewer system. Do not allow materials to be released into the environment without proper government permits.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial, or state and local regulations.
Contaminated Packaging:	Do not re-use empty containers. Dispose of as unused product.

SECTION 14: Transportation Information

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

SECTION 15: Regulatory Information

Health Phrases:	Not hazardous
Risk Phrases:	N/A
Safety Phrases:	N/A
EU Regulations:	N/A
US Regulations:	TSCA: Not listed California Proposition 65: Not listed
U.S. Federal Regulations:	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. 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. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: No products were found.
WHMIS (Canada):	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.*