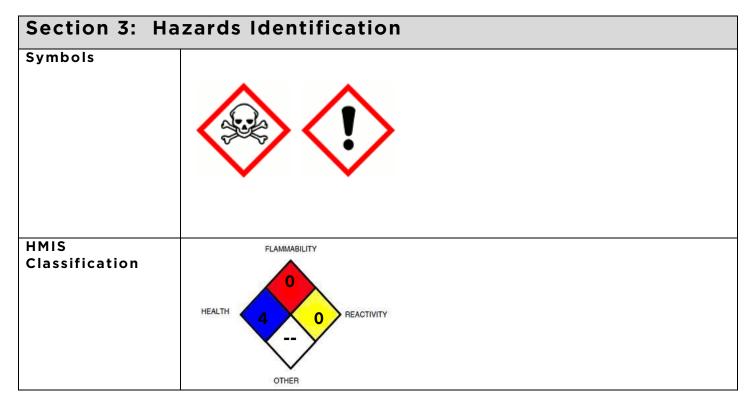


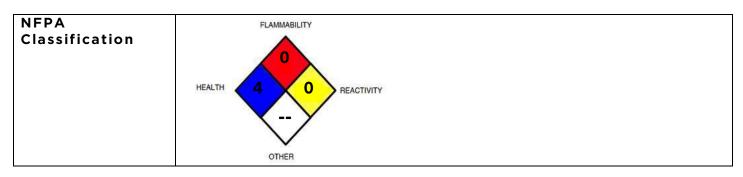
Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Blasticidin S HCl	
Product #:	B-1247	
Synonyms:	Blasticidin S; Bla-S	
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
Blasticidin S Hydrochloride	3513-03-9	609-067-6	100







Section 4: First Aid Measures		
General Overview:	Consult a doctor and show this safety data sheet.	
Inhalation:	Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.	
Skin:	Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.	
Eyes:	Flush with copious amounts of water for at least 15 minutes. Consult a doctor.	
Ingestion:	Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.	
	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:	Dry powder
Hazardous thermal (de)composition products:	Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas.
Special Fire Fighting Procedures:	Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.
Flash Point:	No data available

Section 6:	Accidental Release Measures
Personal	Do not take action without suitable protective clothing - see section 8 of SDS.
Precautions:	Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid
	breathing vapors, mist, dust or gas.



Environmental	Do not let product enter drains.
Precautions:	
Methods for	Cover spillage with suitable absorbent material. Using non-spark tools, sweep
Clean-up:	up material and place in an appropriate container. Decontaminate spill site with 10% caustic solution and ventilate area until after disposal is complete. Hold all material for appropriate disposal as described under section 13 of SDS.

SECTION 7:	Handling & Storage
Storage:	Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use. Store at - 20°C.
Handling:	Use in a chemical fume hood, with air supplied by an independent system. Avoid inhalation, contact with eyes, skin, and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:



Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Skin and Body:





Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Wear appropriate protective clothing. Complete suit protecting against chemicals. The type of protective equipment must be



	selected according to the concentration and amount of the dangerous substance at the specific workplace.
Eyes:	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Ventilation/Engineering Measures:	Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station. Do not let product enter drains.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	No data available

SECTION 9: Physical and Chemical Properties		
Appearance &	White powder	
Odor:		
Formula	C ₁₇ H ₂₆ N ₈ O ₅ • HCl	
Molecular Wt.	458.9	
Melting Pt.	248-252°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:	Clear, slightly yellow solution at 5 mg/mL in water	
Flash Point:	No data available	
Autoignition	No data available	
Temp:		

SECTION 10: Stability and Reactivity		
Stability:	Stable under recommended transport or storage conditions.	
Hazardous decomposition products:	Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen chloride gas	
Materials to Avoid:	Strong oxidizing agents, strong acids, strong bases	



Conditions to avoid:	No data available

SECTION 11: Toxicological Information		
RTECS#:	N/A	
ACUTE Toxicity:	LD50 Oral = 1 mg/kg (Rat)	
CHRONIC Toxicity:	N/A	
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	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. 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. 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. 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. EPA: No classification on carcinogenic data is available from EPA	

SECTION 12: Ecological Information		
Ecotoxicity:	No data available	
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:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.	

SECTION 13: Disposal Considerations		
Residue Waste or Unused product:	Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.	
Contaminated	Dispose of container and unused contents in accordance with federal,	
Packaging:	state and local requirements.	



SECTION 14: Transportation Information		
UN ID#:	2811	
ADR / RID (LAND):	Proper Shipping Name: Toxic Solids, Organic, N.O.S. (Blasticidin S hydrochloride) Hazard Class: 6.1 Packaging Group: II	
DOT regulations:	Proper Shipping Name: Toxic Solids, Organic, N.O.S. (Blasticidin S hydrochloride) Hazard Class: 6.1 Packaging Group: II	
IMDG/IMO (SEA):	Proper Shipping Name: Toxic Solids, Organic, N.O.S. (Blasticidin S hydrochloride) Hazard Class: 6.1 Packaging Group: II	
IATA/DGR (AIR):	Proper Shipping Name: Toxic Solids, Organic, N.O.S. (Blasticidin S hydrochloride) Hazard Class: 6.1 Packaging Group: II	
Special Provisions:	N/A	

SECTION 15: Regulatory Information		
Health Phrases:	H300 Fatal if swallowed (Acute Toxicity Cat. 2)	
	H312 Harmful in contact with skin (Acute Toxicity Cat. 4)	
Risk Phrases:	P264 Wash skin thoroughly after handling	
	P270 Do not eat, drink or smoke when using this product.	
	P280 Wear protective gloves/ protective clothing/ eye protection/ face	
	protection.	
Safety Phrases:	P301 + P310 IF SWALLOWED: Call a POISON CENTER or doctor/	
	physician.	
	P302 + P352 IF ON SKIN: Wash with plenty of soap and water.	
	P312 Call a POISON CENTER or doctor/physician if you feel unwell.	
	P321 Specific treatment (see. on this label).	
	P330 Rinse mouth.	
	P362 + P364 Take off contaminated clothing and wash before reuse.	
	P405 Store locked up.	
	P501 Dispose of contents/ container to an approved waste disposal plant.	
EU Regulations:	N/A	
US Regulations:	TSCA: Not listed	
	California Proposition 65: Not listed	
	New Jersey State Right to Know: Listed	
	Pennsylvania State Right to Know: Listed	
	Rhode Island State Right to Know: Listed	
U.S. Federal	SARA 302/304/311/312 extremely hazardous substances: No products	
Regulations:	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: Blasticidin S Hydrochloride (CAS 3513-03-9), 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. 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):	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

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.