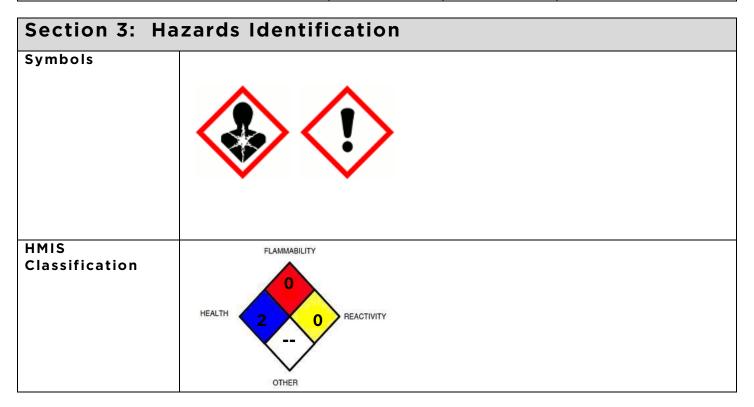


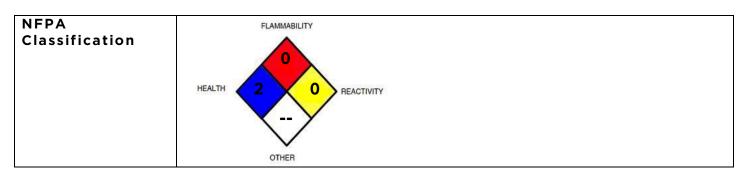
Safety Data Sheet

Section 1: Produc	t & Company Identification
Product Name:	Sulbactam
Product #:	S-2815
Synonyms:	CP 45,899; Penicillanic Acid Dioxide
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 / I	nformatio	n on Ingre	dients
Component	CAS#	EC#	% Composition
Sulbactam	68373-14-8	269-878-2	≥ 98







Section 4:	First Aid Measures
General Overview:	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
	May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects.
Inhalation:	Supply fresh air and to be sure, call for a doctor. In case of unconsciousness, place patient stably in side position for transportation.
Skin:	Immediately wash with water and soap and rinse thoroughly.
Eyes:	Rinse opened eyes for several minutes under running water.
Ingestion:	Immediately call 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:	Use fire fighting measures that suit the environment. A solid water stream may be inefficient.
Hazardous thermal (de)composition products:	No data available
Special Fire Fighting Procedures:	No data available
Flash Point:	No data available

Section 6: A	ccidental Release Measures
Personal	Not required
Precautions:	
Environmental	Do not allow to enter sewers/ surface or ground water.
Precautions:	



Methods for	Dispose contaminated material as waste according to item 13.
Clean-up:	

SECTION 7:	Handling & Storage
Storage:	Recommended storage temperature: -20°C
Handling:	Ensure good ventilation/exhaustion at the workplace.

Handling: Ensure 9	good ventuation/ exhaustion at the workplace.
SECTION 8: Expos	ure controls / Personal Protection
Respiratory Protection:	In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Skin and Body:	Protective gloves and lab coat
Eyes:	Not required.
Ventilation/Engineering Measures:	Ensure adequate ventilation.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	N/A



SECTION 9: P	hysical and Chemical Properties
Appearance &	Solid, characteristic odor
Odor:	
Formula	$C_8H_{11}NO_5S$
Molecular Wt.	233.2
Melting Pt.	No data available
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:	DMF (30 mg/mL); DMSO (30 mg/mL); Ethanol (30 mg/mL); PBS [pH 7.2] (5
	mg/mL)
Flash Point:	No data available
Autoignition	No data available
Temp:	

SECTION 10: Sta	bility and Reactivity
Stability:	Stable under recommended conditions.
Hazardous	Carbon dioxide, Carbon monoxide, Hydrogen sulfide, Nitrogen oxides
decomposition	
products:	
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	No data available

SECTION 11: To	xicological Information
RTECS#:	N/A
ACUTE Toxicity:	Sensitization is possible through inhalation. Sensitization is possible through skin contact.
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:	Water hazard class 1 (self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.	
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:	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.	
Contaminated Packaging:	Disposal must be made according to official regulations.	

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:	Danger! H302 Harmful if swallowed. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 May cause an allergic skin reaction.
Risk Phrases:	P261 Avoid breathing dust/fume/gas/mist/vapors/spray P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.



	P272 Contaminated work clothing must not be allowed out of the
	workplace.
	P280 Wear protective gloves.
	P284 In case of inadequate ventilation] wear respiratory protection.
Safety Phrases:	P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.
Salety Fillases.	P330 Rinse mouth.
	P302+P352 If on skin: Wash with plenty of water.
	P304+P341 If inhaled: If breathing is difficult, remove person to fresh air
	and keep comfortable for breathing.
	P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
	P321 Specific treatment (see on this label).
	P342+P311 If experiencing respiratory symptoms: Call a poison center/
	doctor.
	P363 Wash contaminated clothing before reuse.
	P501 Dispose of contents/container in accordance with local/regional/
	national/international regulations.
EU Regulations:	N/A
US Regulations:	TSCA: Not listed
	California Proposition 65: No products were found
U.S. Federal	SARA 302/304 emergency planning and notification: No products were
Regulations:	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.
	100.110.1
	OSHA: No products were found.

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.