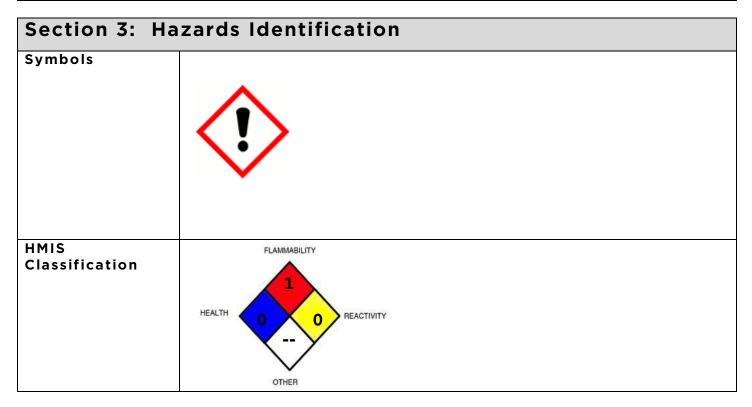


### Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	A23187, Free Acid	
Product #:	A-1020	
Synonyms:	Calcium Ionophore A23187; Calcimycin; Antibiotic A23187; Calcium Ionophore	
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
A23187	52665-69-7	258-084-1	100



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NFPA	FLAMMABILITY
Classification	HEALTH 2 0 REACTIVITY OTHER

# Section 4: First Aid Measures

General	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/
Overview:	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).
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:	383.39°C

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#### Section 6: Accidental Release Measures

Personal	Use personal protective equipment as required. Evacuate personnel to safe
Precautions:	areas. Keep people away from and upwind of spill/leak.
Environmental	Prevent entry into waterways, sewers, basements, or confined areas. Do not
Precautions:	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	Prevent further leakage or spillage if safe to do so. Use personal protective
Clean-up:	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. Protect from moisture. 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. Handle in accordance with good industrial hygiene and safety practice. Corrosive hazard. Wear protective gloves/clothing and eye/face protection.

#### **SECTION 8: Exposure controls / Personal Protection**

**Respiratory Protection:** 



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.

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Skin and Body:	Wear protective gloves and protective clothing.
Eyes:	Tight sealing safety goggles. Face protection shield.
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 &	White powder
Odor:	
Formula	$C_{29}H_{37}N_{3}O_{6}$
Molecular Wt.	523.62
Melting Pt.	No data available
Boiling Pt.	710.33°C
Density:	1.29 g/cm <sup>3</sup>
Vapor Pressure:	No data available
<b>Evaporation Rate:</b>	No data available
Vapor Density:	No data available
Solubility:	Soluble in DMSO, Methanol, Dichloromethane. Slightly soluble in water.
Flash Point:	383.39°C
Autoignition	No data available
Temp:	



# SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous	Carbon oxides. Nitrogen oxides (NO <sub>x</sub> )
decomposition products:	
Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	Exposure to air or moisture over prolonged periods

#### **SECTION 11:** Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	N/A
CHRONIC Toxicity:	N/A
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	<ul> <li>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.</li> <li>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.</li> <li>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.</li> <li>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 NTP.</li> <li>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.</li> <li>EPA: No classification on carcinogenic data is available from EPA</li> </ul>

SECTION 12: Ecological Information		
Ecotoxicity:	May cause long lasting harmful effects to aquatic life.	
Mobility:	No data available	
Persistence and	No data available	
degradability:		
Bioaccumulative	No data available	
potential:		
Other adverse	No data available	
effects:		
Corrosivity	No data available	
Characteristic:		
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	Disposal should be in accordance with applicable regional, national and
Unused product:	local laws and regulations.
Contaminated	Do not reuse container. Waste codes should be assigned by the user
Packaging:	based on the application for which the product was used.

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		
	H319: Causes serious eye irritation	Health Phrases:
	H335: May cause respiratory irritation	
handling	P264: Wash face, hands, and any exposed skin thoroughly after har	Risk Phrases:
on/face	P280: Wear protective gloves/protective clothing/eye protection/f	
	protection	
only	P261: Avoid breathing dust/fume/gas/mist/vapors/spray Use only	
	outdoors or in a well-ventilated area	
itly closed.	P403+P233: Store in a well-ventilated place. Keep container tightly	
	P405: Store locked up	
osal plant	P501: Dispose of contents/container to an approved waste disposa	
tion	P307+P313: IF exposed or concerned: Get medical advice/attentior	Safety Phrases:
veral	P305+P351+P338: IF IN EYES: Rinse cautiously with water for sever	
tinue	minutes. Remove contact lenses, if present and easy to do. Continu	
	rinsing If eye irritation persists: Get medical advice/attention	
rest in a	P304+P340: IF INHALED: Remove victim to fresh air and keep at res	
octor/	position comfortable for breathing Call a POISON CENTER or docto	
	physician if you feel unwell	
	N/A	EU Regulations:
	TSCA: Not listed	<b>US Regulations:</b>
	California Proposition 65: Not listed	
roducts	SARA 302/304/311/312 extremely hazardous substances: No prod	U.S. Federal
	were found	<b>Regulations:</b>
ts were	SARA 302/304 emergency planning and notification: No products v	-
	found.	
e found.	SARA 302/304/311/312 hazardous chemicals: No products were fo	
	SARA 311/312 MSDS distribution-chemical inventory-hazard	
azard	identification: A23187 (CAS 52665-69-7), Acute Health Haza	
	SARA 313 toxic chemicals notification and release reporting: No pro	
	were found.	
	identification: A23187 (CAS 52665-69-7), Acute Health Haza SARA 313 toxic chemicals notification and release reporting: No pro	



	<ul> <li>Clean Water Act (CWA) 307: No products were found.</li> <li>Clean Water Act (CWA) 311: No products were found.</li> <li>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</li> <li>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</li> <li>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</li> </ul>
	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 allinclusive 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.