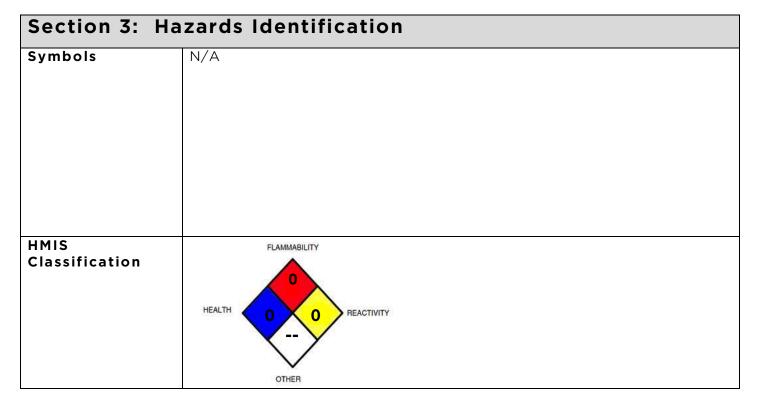


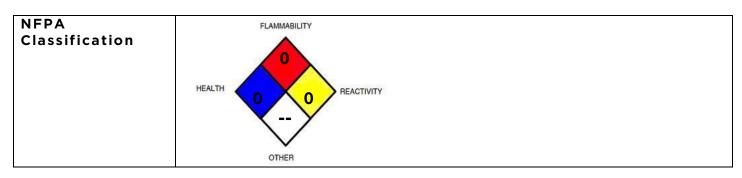
Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Pyruvic Acid Sodium Salt	
Product #:	P-2911	
Synonyms:	Sodium pyruvate; sodium 2-oxopropanoate; Sodium alpha-ketopropionate; 2-Oxopropanoic acid sodium salt	
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#	%	HCS Classification
Sodium Pyruvate	113-24-6	204-024-4	100%	Not hazardous







Section 4: First Aid Measures		
General	Consult a doctor and show this safety data sheet.	
Overview:		
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:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.		
Hazardous thermal (de)composition products:	No data available		
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. Recommended storage temperature: 2 - 8 °C. Keep in a dry place. Storage class (TRGS 510): Non Combustible Solids.
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	Use in a fume hood where applicable. Ensure all engineering	
Measures:	measures described under section 7 of SDS are in place. Ensure	
	laboratory is equipped with a safety shower and eye wash station.	
Hygiene:	Wash hands after handling compound and before eating, smoking,	
	using lavatory and at the end of the day.	
Other:	Do not let product enter drains. Contains no substances with occupational exposure limit values.	

SECTION 9: Physical and Chemical Properties		
Appearance & Odor:	White powder	
Formula	C ₃ H ₃ NaO ₃	
Molecular Wt.	110.04	
Melting Pt.	> 300 °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:	No data available	
Flash Point:	No data available	
Autoignition	No data available	
Temp:		

SECTION 10: Stability and Reactivity		
Stability:	Stable under recommended storage conditions	
Hazardous	No data available	
decomposition products:		



Materials to Avoid:	Strong oxidizing agents
Conditions to avoid:	Direct sunlight

SECTION 11: Toxicological Information		
RTECS#:	N/A	
ACUTE Toxicity:	LD50 Oral: 5600 mg/kg (Rat) LD50 Dermal: Not listed LD50 Inhalation: Not listed LD50 Intraperitonea: Not listed	
CHRONIC Toxicity:	N/A	
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	There are no known carcinogenic chemicals in this product.	

SECTION 12: Ecological Information		
Ecotoxicity:	No data available	
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:	No data available	

SECTION 13: Disposal Considerations		
Residue Waste or Unused product:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.	
Contaminated Packaging:	Dispose of container and unused contents in accordance with federal, state and local requirements.	

SECTION 14: Transportation Information	
UN ID#:	N/A
ADR / RID (LAND):	N/A



DOT regulations:	Not regulated
IMDG/IMO (SEA):	Not regulated
IATA/DGR (AIR):	Not regulated
Special Provisions:	N/A

SECTION 15: Regulatory Information	
Health Phrases:	N/A
Risk Phrases:	P101 If medical advice is needed, have product container or label at hand P102 Keep out of reach of children. P501 Dispose of contents/ container to an approved waste disposal plant.
Safety Phrases:	N/A
EU Regulations:	
US Regulations:	TSCA: Listed
	California Proposition 65: This product does not contain any Proposition 65 chemicals. U.S. DEPARTMENT OF HOMELAND SECURITY: This product does not contain any DHS chemicals. New Jersey Right to Know: Listed
	Pennsylvania 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: 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):	This product has been classified in accordance with the hazard criteria of
whits (Canada):	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.