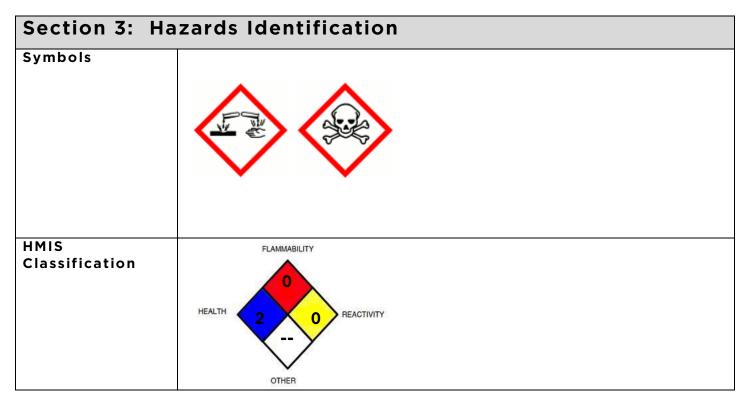


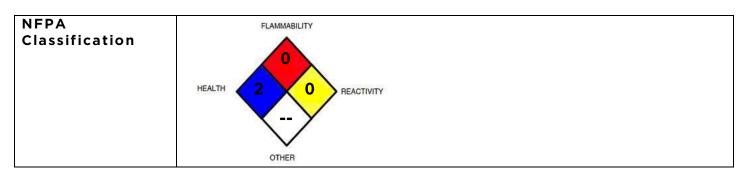
Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	PMSF (Phenylmethylsulfonyl Fluoride)	
Product #:	P-2401	
Synonyms:	Phenylmethylsulfonyl fluoride	
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
Phenylmethylsulfonyl fluoride	329-98-6	206-350-2	≥98.5







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:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Hazardous thermal (de)composition products:	Carbon oxides, Sulfur oxides, Hydrogen fluoride.
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 Precautions:	Do not let product enter drains.
Methods for Clean-up:	Cover spillage with suitable absorbent material. Using non-spark tools, sweep 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 room temperature.
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: Skin and Body: 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.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	Contains no substances with occupational exposure limit values.

SECTION 9: Physical and Chemical Properties		
Appearance &	White solid	
Odor:		
Formula	C ₇ H ₇ FO ₂ S	
Molecular Wt.	174.2	
Melting Pt.	91 - 94°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:	Chloroform, diethyl ether	
Flash Point:	No data available	
Autoignition	No data available	
Temp:		

SECTION 10: Stability and Reactivity		
Stability:	Stable under recommended transport or storage conditions.	
Hazardous	No data available	
decomposition		
products:		
Materials to Avoid:	Strong oxidizing agents, strong bases, acids	
Conditions to avoid:	Water hydrolyzes material liberating acidic gas which in contact with	
	metal surfaces can generate flammable and/or explosive hydrogen gas.	

SECTION 11: Toxicological Information		
RTECS#:	N/A	
ACUTE Toxicity:	LD50 Oral = 20 mg/kg (mouse)	
CHRONIC Toxicity:	N/A	



Chronic Exposure:	IARC: No component of this product present at levels greater than or
Carcinogen:	equal to 0.1% is identified as probable, possible, or confirmed human
Mutagen:	carcinogen by IARC.
Teratogen:	AGGIH: No component of this product present at levels greater than or
Reproductive:	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:	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	Dispose of container and unused contents in accordance with federal,	
Packaging:	state and local requirements.	

SECTION 14: Transportation Information		
UN ID#:	2928	
ADR / RID (LAND):	Proper Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S Hazard Class: 8 (6.1) Packaging Group: II	
DOT regulations:	Proper Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S	



	Hazard Class: 8 (6.1)
	Packaging Group: II
IMDG/IMO (SEA):	Proper Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S
	Hazard Class: 8 (6.1)
	Packaging Group: II
IATA/DGR (AIR):	Proper Shipping Name: TOXIC SOLID, CORROSIVE, ORGANIC, N.O.S
	Hazard Class: 8 (6.1)
	Packaging Group: II
Special Provisions:	N/A

SECTION 15: Re	gulatory Information
Health Phrases:	H301 Toxic if swallowed
	H314 Causes severe skin burns and eye damage.
	H318 Causes serious eye damage
Risk Phrases:	P260 Do not breathe dust or mist.
	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.
	P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce
	vomiting.
	P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately
	all contaminated clothing. Rinse skin with water/ shower.
	P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a
	position comfortable for breathing.
	P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several
	minutes. Remove contact lenses, if present and easy to do. Continue
	rinsing.
	P310 Immediately call a POISON CENTER or doctor/ physician.
	P321 Specific treatment (see supplemental first aid instructions on this
	label).
EU Regulations:	N/A
US Regulations:	TSCA: Listed
	California Proposition 65: No products were found
	New Jersey State Right to Know: Listed
	Pennsylvania State Right to Know: Listed
U.S. Federal	SARA 302/304 emergency planning and notification: No products were
Regulations:	found.
	SARA 311/312 MSDS distribution-chemical inventory-hazard
	identification: 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: Acute toxicity, oral (Cat. 3); Skin corrosion/irritation (Cat. 1); Serious eye damage (Cat. 1)
WHMIS (Canada):	DSL: Listed

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.