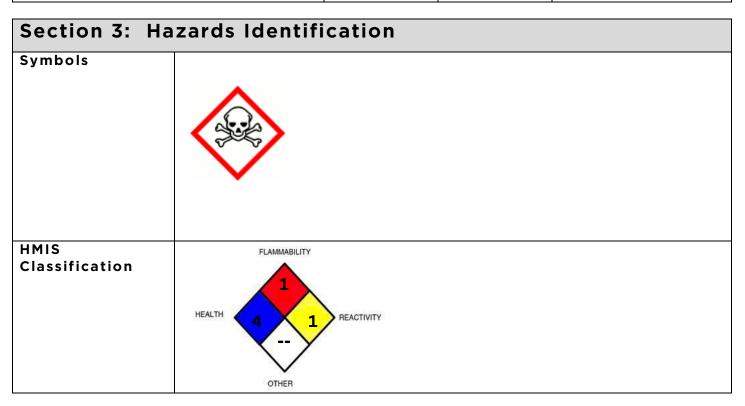


Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Wortmannin	
Product #:	W-1022	
Synonyms:	Penicillium wortmanni; KY 12420; SL-2052	
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
Wortmannin	19545-26-7	-	>98





NFPA	FLAMMABILITY
Classification	HEALTH 4 1 REACTIVITY OTHER

Section 4: F	irst Aid Measures
General Overview:	Immediate medical attention is required. If symptoms persist, call a physician.
Inhalation:	Immediate medical attention is required Remove to fresh air If not breathing, give artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary Call a physician Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician.
Skin:	Immediate medical attention is required. 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.
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. Call a physician immediately. If symptoms persist, call a physician.
Ingestion:	Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures		
Flammability of	No data available	
the product:		
Extinguishing	Use extinguishing measures that are appropriate to local circumstances and	
Media:	the surrounding environment. In case of fire: Use CO2, dry chemical, or foam for extinction. DO NOT USE WATER.	
Hazardous	Carbon oxides	
thermal		
(de)composition products:		



Special Fire	Wear self-contained breathing apparatus and protective suit.
Fighting Procedures:	
Flash Point:	326.1°C

Section 6: Accidental Release Measures

Personal Precautions:	Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.
Methods for Clean-up:	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal. Use personal protective equipment as required. Take up mechanically, placing inappropriate containers for disposal. Clean contaminated surface thoroughly. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Avoid creating dust. 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 & StorageStorage: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. 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. Noxious vapor/odor. Ensure
adequate ventilation, especially in confined areas.

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.	
Skin and Body:	Wear protective gloves and protective clothing.	
Eyes:	Tight sealing safety goggles. Face protection shield.	
Ventilation/Engineering Measures:	Ensure adequate ventilation, especially in confined areas.	
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 & Odor:	Yellow powder	
Formula	C ₂₃ H ₂₄ O ₈	
Molecular Wt.	428.43	
Melting Pt.	237.52°C	
Boiling Pt.	615.6°C	
Liquid Density:	4.4 g/cm ³	
Partition coefficient:	0.22	
Evaporation Rate:	No data available	
Vapor Density:	No data available	
Solubility:	DMSO, ethanol	
Flash Point:	326.1°C	
Autoignition Temp:	No data available	



SECTION 10: Stability and Reactivity

Stability:	Stable under recommended storage conditions.
Hazardous	Carbon oxides
decomposition	
products:	
Materials to Avoid:	Avoid strong oxidizing agents and water.
Conditions to avoid:	Keep away from any possible contact with water because of violent
	reaction and possible flash fire.

SECTION 11: Toxicological Information

	-
RTECS#:	N/A
ACUTE Toxicity:	N/A
CHRONIC Toxicity:	Prolonged or repeated exposure increases the risk. Possible risk of irreversible effects. Avoid repeated exposure.
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 NTP.
	EPA: No classification on carcinogenic data is available from EPA

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		
Packaging:		

SECTION 14: Transportation Information		
UN ID#:	3462	
ADR / RID (LAND):	N/A	
DOT regulations:	UN3462	
	Hazard Class: 6.1	
	Packing Group: I	
	Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s.	
	Description: UN3462, Toxins, extracted from living sources, solid, n.o.s.,	
	6.1, I	
	Emergency Response Guide Number: 153	
IMDG/IMO (SEA):	UN3462	
	Hazard Class: 6.1	
	Packing Group: I	
	Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s.	
	Description: UN3462, Toxins, extracted from living sources, solid, n.o.s.	
	(Wortmannin), 6.1, I	
	Special Provisions: 210, 274	
	EmS-No: F-A, S-A	
IATA/DGR (AIR):	UN3462	
	Hazard Class: 6.1	
	Packing Group: I	
	Proper Shipping Name: Toxins, extracted from living sources, solid, n.o.s.	
	Description: UN3462, Toxins, extracted from living sources, solid, n.o.s.	
	(Wortmannin), 6.1, I	
	ERG Code: 6L	
Special Provisions:	210, 274	

SECTION 15: Regulatory Information	
Health Phrases:	 H310 Fatal in contact with skin H330 Fatal if inhaled H300 Fatal if swallowed P264 Wash face, hands, and any exposed skin thoroughly after handling P270 Do not eat, drink, or smoke when using this product P262 Do not get in eyes, on skin, or on clothing P280 Wear protective gloves/protective clothing/eye protection/face protection P260 Do not breathe dust/fume/gas/mist/vapors/spray P271 Use only outdoors or in a well-ventilated area



	P284 Wear respiratory protection
	P308+P313 IF exposed or concerned: Get medical advice/attention
	P302+P350+P310 IF ON SKIN: Gently wash with plenty of soap and water.
	Immediately call a POISON CENTER or doctor/physician
	P361 Remove/Take off immediately all contaminated clothing
	P363 Wash contaminated clothing before reuse
	P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest
	in a position comfortable for breathing. Immediately call a POISON
	CENTER or doctor/physician.
	P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER
	or doctor/ physician. Rinse mouth
Risk Phrases:	N/A
Safety Phrases:	N/A
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: Acute Health Hazard, Chronic Health Hazard,
	Reactive 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. 1); Acute toxicity - Dermal (Cat. 2);
	Acute toxicity - Inhalation dusts/mists (Cat. 1)
WHMIS (Canada):	N/A
	14/74

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.