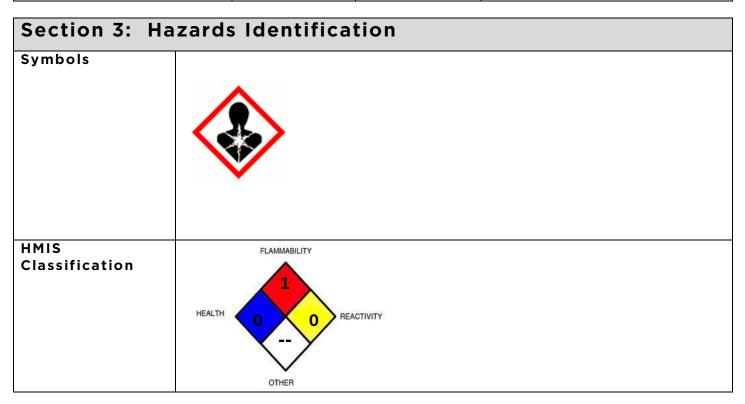


Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Fumonisin B1	
Product #:	F-1022	
Synonyms:	Macrofusine; FB1	
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
Fumonisin B1	116355-83-0	-	100





NFPA	FLAMMABILITY
Classification	HEALTH 0 0 REACTIVITY OTHER

Section 4: First Aid Measures	
General Overview:	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Immediate medical attention is required.
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.
Skin:	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
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.
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.
	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:	Protective equipment and precautions for firefighters. Wear self-contained breathing apparatus and protective suit.
Flash Point:	513.17°C



Section 6: Accidental Release Measures

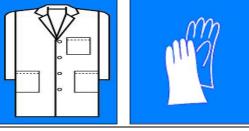
Personal	Use personal protective equipment as required. Keep people away from and
Precautions:	upwind of spill/leak.
Environmental	Prevent further leakage or spillage if safe to do so. Prevent product from
Precautions:	entering drains. See Section 12 for additional Ecological Information.
Methods for	Prevent further leakage or spillage if safe to do so. Cover powder spill with
Clean-up:	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 in appropriate 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.

SECTION 7:	Handling & Storage
Storage:	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. 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.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	
	If exposure limits are exceeded or i NIOSH/MSHA approved respiratory Positive-pressure supplied air respi airborne contaminant concentration be provided in accordance with cur
Skin and Body:	

irritation is experienced, ry protection should be worn. pirators may be required for high ons. Respiratory protection must irrent local regulations.





	Wear protective gloves and protective clothing.
Eyes:	Tight sealing safety goggles.
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 &	Beige powder	
Odor:		
Formula	$C_{34}H_{59}NO_{15} \cdot H_2O$	
Molecular Wt.	721.8	
Melting Pt.	No data available	
Boiling Pt.	924.91°C	
Liquid Density:	1.3 g/cm ³	
Partition	2.24	
Coefficient		
Evaporation Rate:	No data available	
Vapor Density:	No data available	
Solubility:	Ethanol (10 mg/mL), Methanol (10 mg/mL), DMSO (7.22 mg/mL), Water or	
	PBS (18 mg/mL), Acetonitrile (10 mg/mL)	
Flash Point:	No data available	
Autoignition	No data available	
Temp:		

SECTION 10: Stability and Reactivity		
Stability:	Stable under recommended storage conditions.	
Hazardous decomposition products:	Carbon oxides, Nitrogen oxides (NOx)	
Materials to Avoid:	Strong oxidizing agents	
Conditions to avoid:	Extremes of temperature and direct sunlight	



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.	
Chronic Exposure: Carcinogen: Mutagen: Teratogen:	IARC: Fumonisin B1 (CAS 116355-83-0) Group 2B 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.	
Reproductive:	 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: Fumonisin B1 (CAS 116355-83-0) 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:	No data available	

SECTION 13: Disposal Considerations		
Residue Waste or Unused product:	Disposal should be in accordance with applicable regional, national and local laws and regulations.	
Contaminated Packaging:	Do not reuse container.	

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:	H351 Suspected of causing cancer	
Risk Phrases:	P201 Obtain special instructions before use	
	P202 Do not handle until all safety precautions have been read and	
	understood	
	P281 Use personal protective equipment as required	
Safety Phrases:	P308+P313 IF exposed or concerned: Get medical advice/attention	
	P405 Store locked up	
	P501 Dispose of contents/container to an approved waste disposal plant	
EU Regulations:	N/A	
US Regulations:	TSCA: No products listed	
	California Proposition 65: Fumonisin B1 (CAS 116355-83-0)	
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: Fumonisin B1 (CAS 116355-83-0), Chronic 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: Fumonisin B1 (CAS 116355-83-0)	
China (IECSC):	Fumonisin B1 (CAS 116355-83-0)	
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.