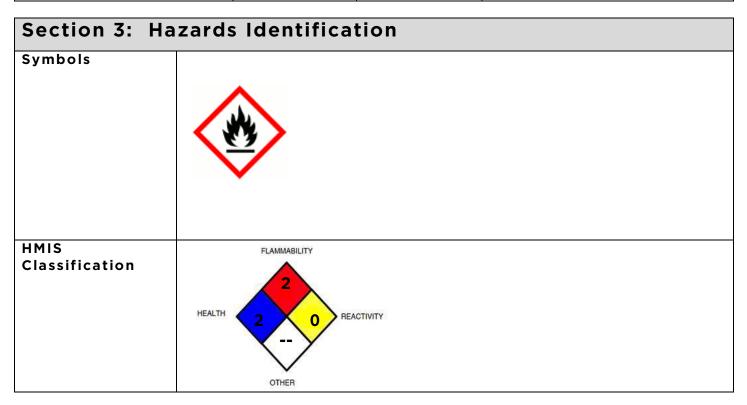


Safety Data Sheet

Section 1: Product & Company Identification		
Product Name:	Mannose 4B-CL Agarose	
Product #:	M-2797	
Synonyms:	-	
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
Ethanol	61-17-5	200-578-6	≤20





NFPA	FLAMMABILITY
Classification	HEALTH 2 0 OTHER

Section 4: First Aid Measures

General	Consult a physician if symptoms are severe or persistent. Provide this data
Overview:	sheet to medical personnel. If product is spilled or leaked, evacuate area.
Inhalation:	If inhaled, move person to fresh air and monitor breathing. If not breathing, give artificial ventilation. Consult a physician if symptoms are severe or persistent.
Skin:	Immediately wash with excess soap and water. If spilled on clothing, remove all affected clothing. Consult a physician if symptoms are severe or persistent.
Eyes:	Flush eyes with water or eye wash solution as a precaution for 15 minutes. Consult a physician if symptoms are severe or persistent.
Ingestion:	Only induce vomiting if recommended by medical personnel. If subject is unconscious, do not give anything by mouth. If conscious, rinse mouth with water. Consult a physician if symptoms are severe or persistent.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures		
Flammability of	Combustible. Forms explosive mixture with air at elevated temperatures. May	
the product:	develop hazardous gases upon combustion.	
Extinguishing	Water spray, alcohol-resistant foam, dry chemical, and carbon dioxide	
Media:	extinguishers are suitable.	
Hazardous	No data available	
thermal		
(de)composition		
products:		
Special Fire	Wear protective gear, such as self-contained breathing apparatus, if	
Fighting	necessary.	
Procedures:		
Flash Point:	No data available	

Section 6: Accidental Release Measures

Personal	Provide suitable ventilation. Use any necessary personal protective equipment.
Precautions:	Avoid contact with skin and eyes and avoid creation and inhalation of vapor or
	dust. Keep all unnecessary personnel away.



Environmental	Prevent product from entering public sewers and waterways.
Precautions:	
Methods for	Use inert absorbent material to absorb any spilled or leaked product. Keep in
Clean-up:	suitable, closed containers for disposal.

SECTION 7: Handling & Storage

Storage:	Store upright, closed container in arid, ventilated environment. Storage Temperature: 2-8°C.
Handling:	Provide suitable ventilation. Wear any necessary personal protective equipment. Keep away from open flames, hot surfaces, and sources of ignition. Use spark-proof tools and explosion-proof equipment.

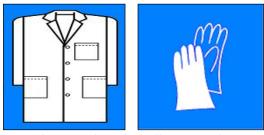
SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:



Use only approved respirators and components which comply with CDC and NIOSH (US) or CEN (EU) regulations. Required only when vapors or aerosols are created.

Skin and Body:



Use gloves when handling product. Inspect gloves before use to ensure suitability for use. Remove without exposing skin to the gloves outer surface. Discard used gloves according to all pertinent laws and/or current good practices (cGXP). Wash hands with soap and water.

Wear appropriate clothing. Ensure clothing is in good condition, with no holes or tears. When selecting clothing, consider the concentration and amount of substance to be handled.



Eyes:	Use only government-approved safety glasses with side-shields.	
Ventilation/Engineering Measures:	Prevent product from entering the environment, especially through public sewers or waterways.	
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.	
Other:	N/A	

SECTION 9: Physical and Chemical Properties

Appearance &	Liquid suspension
Odor:	
Formula	N/A
Molecular Wt.	N/A
Melting Pt.	No data available
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:	Avoid all possible sources of ignition (spark or flame).	
Hazardous decomposition products:	Flammable gases may be formed when in contact with transition-metal oxides, strong acids and their salts, ethylene oxide, chromyl chloride, diatomic halogens, strong agents, alkali oxides, and alkali and alkaline earth metals.	
Materials to Avoid:	Strong oxidizing agents are incompatible with this product.	
Conditions to avoid:	No data available	

SECTION 11: Toxicological Information

RTECS#:

N/A



ACUTE Toxicity:	LD50 Oral = 6.2 g/kg (Rat) LD50 Inhalation = 95.6 mg/L (Rat) - 4h, ethanol
CHRONIC Toxicity:	N/A
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. 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:	Species: Fathead Minnow (Pimephales promelas). Exposure: 96 hours. Result: LC50 14,200 mg/L Species: Water Flea (Ceriodaphnia dubia). Exposure: 48 hours.
	Result: LC50 5,012 mg/L
	Species: Water Flea (Daphnia magna). Exposure: 9 days. Result: NOEC 9.6 mg/L
	Species: Fresh Water Algae (Chlorella vulgaris). Exposure: 72 hours. Result: EC50 275 mg/L
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	Chemical waste generators must determine whether a discarded
Unused product:	chemical is classified as a hazardous waste. Chemical waste generators



	must also consult and adhere to local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
Contaminated	Packaging should be disposed of in the same manner as unused
Packaging:	product.

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:	H226 Flammable liquid and vapor.
Risk Phrases:	P210 Keep away from heat, hot surfaces, open flames, and other ignition
	sources. No smoking.
	P242 Use only non-sparking tools.
	P243 Take precautionary measures against static discharge.
	P280 Wear protective gloves/clothing/eye protection/face protection.
Safety Phrases:	P303+361+353 If on skin (or hair): Take off immediately all contaminated
	clothing. Rinse skin with water/shower.
Ell Dogulations:	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
EU Regulations: US Regulations:	N/A TSCA: No products were found
US Regulations:	
	California Proposition 65: No products were found
	Massachusetts State Right to Know: Ethanol (CAS 64-17-5) New Jersey State Right to Know: Ethanol (CAS 64-17-5)
	Pennsylvania State Right to Know: Ethanol (CAS 64-17-5)
U.S. Federal	SARA 302/304 emergency planning and notification: No products were
Regulations:	found.
-	SARA 311/312 MSDS distribution-chemical inventory-hazard
	identification: Fire 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: 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.