



MATERIAL SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Agarose, High Gelling Temp (>42 °C)
SYNONYMS:
PRODUCT NUMBER: A110
CAS NO: 9012-36-6
NIOSH/RTECS NO: Not Listed
COMPANY INFO: *PhytoTechnology Laboratories* ®
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent	Hazardous
Agarose	9012-36-6	100 %	OSHA PEL 15 mg/m ³ ; ACGIH TLV 10 mg/m ³

3. PHYSICAL & CHEMICAL PROPERTIES

Product Description: Agarose, High Gelling Temp (>42 C)
Formula: (C₁₂H₁₄O₅(OH)₄)_n
Molecular Weight: Variable
Storage Temperature: RT
pH (7.00 g/L): Under Development (6.0 – 8.0 suspected range)
Vapor Density: N/A
Melting Point: Varies
Specific Gravity: 1.7
Solubility: Soluble in hot water
Appearance: White to pale yellow powder
Odor: Odorless

4. HAZARDS IDENTIFICATION

Label Hazard Warnings: Irritating to eyes, respiratory system, and skin.
Label Precautionary Statements: Wear suitable protective clothing. Do not breathe dust.
Laboratory Protective Equipment: Safety glasses, protective gloves, lab coat, and an appropriate dusk mask.

HMIS Rating:	Health	Flammability	Reactivity	Personal Protection Equipment
	0	0	0	N/A
NFPA Rating:	Health	Flammability	Reactivity	Special Hazards
	0	1	0	-

Storage and Handling Precautions: Store in a tightly sealed container in a cool, dry place. Avoid strong oxidizers. Do not breathe dust. Wash thoroughly after handling.

5. POTENTIAL HEALTH HAZARDS/ TOXICOLOGICAL INFORMATION

Toxicity:	LD ₅₀ (Oral-Rat)(mg/Kg):	N/A
	LD ₅₀ (Oral-Mouse)(mg/Kg):	N/A
	LD ₅₀ (IV-Rat)(mg/Kg):	N/A
Carcinogenicity:	NTP:	No
	IARC:	No
	Z List:	No
	OSHA Reg:	No
Effects of Overexposure:		Irritation, sneezing, gastrointestinal upset
Target Organs:		None identified
Medical Conditions Aggravated By Exposure:		None identified
Routes of Entry:		Inhalation

The toxicological properties of this product have not been thoroughly investigated

6. EMERGENCY AND FIRST AID

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. Get medical attention.
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation persists.
Skin Contact	Direct contact may cause irritation. May cause reddening, itching, or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

7. FIRE HAZARDS & FIRE FIGHTING MEASURES

Flash Point (Closed Cup):	N/A
Flammable Limits:	Upper – N/A % Lower – N/A %
Fire Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.
Special Fire-Fighting Procedures:	In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.
Unusual Fire & Explosion Hazards:	May emit toxic fumes under fire conditions.
Toxic Gases Produced:	Carbon monoxide, carbon dioxide

8. REACTIVITY & CONDITIONS TO AVOID

Stability:	Stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Extreme heat, incompatibles
Incompatibles:	Strong oxidizing agents, some acids
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide

9. SPECIAL PRECAUTIONS/PROTECTIVE EQUIPMENT

Ventilation:	Ventilation hood
Respiratory Protection:	A NIOSH/MSHA approved air purifying respirator is recommended where airborne concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited.
Eye/Skin Protection:	Have eye-washing facilities readily available where eye contact can occur. Wear chemical safety goggles. Use appropriate chemical protective gloves when handling. Showering and changing into street clothes after work is recommended.

10. SPILLS & LEAKS

Spill or Discharge:	Contain spilled material. Sweep up and place in secure, closed containers. Avoid generating dust. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.
Disposal Procedure:	Dispose in accordance with all applicable federal, state, and local environmental regulations.
EPA Hazardous Waste Number:	N/A

11. TRANSPORTATION DATA

Domestic (D.O.T.):	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)
	Hazard Class:	N/A
	UN/NA:	N/A
	Labels:	N/A
International: IMDG:	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)
	Hazard Class:	N/A
	UN/NA:	N/A
	Labels:	N/A
IATA:	Proper Shipping Name:	CHEMICALS, N.O.S. (NON-REGULATED)
	Hazard Class:	N/A
	UN/NA:	N/A
	Labels:	N/A

12. REGULATORY INFORMATION

U.S. Federal Regulatory Information

TSCA: Yes

SARA TITLE III:

Section 302 (EHS) Ingredients: No
Section 313 Ingredients: No
Section 304 (EHS/CERCLA) Ingredients: No

SARA TITLE III NOTIFICATION INFORMATION

Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Sudden Release of Pressure Hazard: No

International Regulatory Information

Risk Phrases: 36/37/38 – Irritating to eyes, respiratory system, and skin

Safety Phrases: 36 – Wear suitable protective clothing

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