according to 29CFR1910/1200 and GHS Rev. 3

Effective date: 10.24.2014

Nutrient Agar

SECTION 1: Identification of the substance/mixture and of the supplier

Product name:

Nutrient Agar

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: KEMAG5000-23G Recommended uses of the product and restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific, Inc. 9 Barnhart Drive Hanover, PA 17331 1-717-632-1291

Supplier Details:

AquaPhoenix Scientific Inc. 9 Barnhart Drive, Hanover PA 17331 (717) 632-1291

Emergency telephone number:

ChemTel: (24-hour) (US and Canada) 1-(800)-255-3924

SECTION 2: Hazards identification

Classification of the substance or mixture:

Not classified for physical or health hazards under GHS.

Signal word: Warning

Hazard statements:

None

Precautionary statements:

If medical advice is needed have product container or label at hand-

Keep out of reach of children.

Read label before use.

Do not eat, drink or smoke when using this product.

Other Non-GHS Classification: None

SECTION 3: Composition/information on ingredients

Ingredients:

Ingredients:			
CAS 9002-18-0	Agar	100 %	
	*	Percentages are by weight	

Safety Data Sheet according to 29CFR1910/1200 and GHS Rev. 3

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Description of first aid measures

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position. Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Get medical assistance if cough or other symptoms appear.

After skin contact:

Rinse/flush exposed skin gently using soap and water for 15-20 minutes. Seek medical advice if discomfort or irritation persists.

After eye contact:

Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing:

Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:

Irritation. Nausea. Headache. Shortness of breath.

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing agents:

Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing agents: None

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. Thermal decomposition can lead to release of irritating gases and vapors.

Advice for firefighters:

Protective equipment:

Use NIOSH-approved respiratory protection/breathing apparatus.

Additional information (precautions):

Move product containers away from fire or keep cool with water spray as a protective measure, where feasible. Use spark-proof tools and explosion-proof equipment. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Ensure that air-handling systems are operational. Ensure adequate ventilation.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13, Should not be released into environment.

Methods and material for containment and cleaning up:

Keep in suitable closed containers for disposal. Wear protective eyeware, gloves, and clothing. Always obey local regulations. Refer to Section 8. Avoid dispersal of dust in the air. Evacuate personnel to safe areas.

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Nutrient Agar

Reference to other sections: None **SECTION 7: Handling and storage** Precautions for safe handling:

Minimize dust generation and accumulation. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Store away from incompatible materials. Protect from freezing and physical damage. Keep away from food and beverages. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store in cool, dry conditions in well sealed containers. Store with like hazards.

SECTION 8: Exposure controls/personal protection





Control parameters:

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use under a fume hood.

Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash

contaminated clothing.

SECTION 9: Physical and chemical properties

Appearance (physical state, color):	light beige solid	Explosion limit lower: Explosion limit upper:	Not determined Not determined
state, color).		Explosion innit apper.	Not determined

according to 29CFR1910/1200 and GHS Rev. 3

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Odor:	Odorless	Vapor pressure at 20°C:	Not determined		
Odor threshold:	Not determined	Vapor density:	Not determined		
pH-value:	Not determined	Relative density:	Not determined		
Melting/Freezing point:	Not determined	Solubilities:	soluble in hot water		
Boiling point/Boiling range:	Not determined	Partition coefficient (noctanol/water):	Not determined		
Flash point (closed cup):	Not determined	Auto/Self-ignition temperature:	Not determined		
Evaporation rate:	Not determined	Decomposition temperature:	Not determined		
Flammability (solid, gaseous):	Not determined	Viscosity:	a. Kinematic: Not determined b. Dynamic: Not determined		
Density at 20°C:	Not determined				

SECTION 10: Stability and reactivity

Reactivity:

Nonreactive under normal conditions.

Chemical stability:

Stable under normal conditions.

Possible hazardous reactions:

None under normal processing.

Conditions to avoid:

Incompatible Materials.

Incompatible materials:

Strong acids. Strong bases. Oxidizing agents.

Hazardous decomposition products: None

SECTION 11: Toxicological information

Acute Toxicity:

Dermal:

LD50 Rabbit >3600 mg/kg NLM CIP

Chronic Toxicity: No additional information.

Skin corrosion/irritation: No additional information.
Serious eye damage/irritation: No additional information.
Respiratory or skin sensitization: No additional information.

Carcinogenicity:

Germ cell mutagenicity: No additional information. **Reproductive Toxicity**: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information:

No additional information.

SECTION 12: Ecological information

according to 29CFR1910/1200 and GHS Rev. 3

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Ecotoxicity: No additional information.

Persistence and degradability: No additional information. **Bioaccumulative potential**: No additional information.

Mobility in soil: No additional information.

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Waste disposal recommendations:

Contact a licensed professional waste disposal service to dispose of this material. Dispose of empty containers as unused product. Product or containers must not be disposed with household garbage. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14: Transport information

US DOT

UN Number:

ADR, ADN, DOT, IMDG, IATA

Not Regulated.

Limited Quantity Exception:

Bulk:

RQ (if applicable): None

Proper shipping Name: Not Regulated.

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information.

Comments: None

None

Non Bulk:

RQ (if applicable): None

Proper shipping Name: Not Regulated,

Hazard Class: None

Packing Group: Not Regulated.

Marine Pollutant (if applicable): No

additional information. **Comments:** None

SECTION 15: Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients are listed.

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

RCRA (hazardous waste code):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

9002-18-0 Agar, Biological: TSCA XU: substance exempt from reporting: not listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

None of the ingredients are listed.

according to 29CFR1910/1200 and GHS Rev. 3

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Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 0-0-0 **HMIS**: 0-0-0

GHS Full Text Phrases: None

Abbreviations and Acronyms:

IMDG International Maritime Code for Dangerous Goods.

IATA International Air Transport Association.

GHS Globally Harmonized System of Classification and Labelling of Chemicals,

ACGIH American Conference of Governmental Industrial Hygienists.

CAS Chemical Abstracts Service (division of the American Chemical Society).

NFPA National Fire Protection Association (USA).

HMIS Hazardous Materials Identification System (USA).

WHMIS Workplace Hazardous Materials Information System (Canada).

DNEL Derived No-Effect Level (REACH).

PNEC. Predicted No-Effect Concentration (REACH).

CFR Code of Federal Regulations (USA).

SARA Superfund Amendments and Reauthorization Act (USA).

RCRA. Resource Conservation and Recovery Act (USA).

TSCA. Toxic Substances Control Act (USA).

NPRI National Pollutant Release Inventory (Canada).

DOT US Department of Transportation.



Product Name: Micropropagation Agar-Type I Catalog Number: A038 Synonyms: Company: Caisson Laboratories Address: 836 South 100 East, Smithfield, UT 84335 Telephone: 435.755.7615 Fax: 435.755.7617 Emergency Contact: CHEMTREC 800.424.9300 (703.527.3887) Recommended Use: Restrictions On Use: II Hazard(s) Identification Overview: Flammability: Reactivity: Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0 Special:	
Emergency Contact: CHEMTREC 800.424.9300 (703.527.3887) Recommended Use: Restrictions On Use: Il Hazard(s) Identification Overview: Flammability: Reactivity: Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	
Overview: Flammability: Reactivity: Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	MARKET THE PARKET OF
Flammability: Reactivity: Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	BE STOWN
Reactivity: Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	
Toxicity: NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	
NFPA Rating Health: 0 Flammability: 1 Reactivity: 0	
Health: 0 Flammability: 1 Reactivity: 0	
Flammability: 1 Reactivity: 0	
Reactivity: 0	
Special:	
Pictograms:	
III Composition / Information on Ingredients	
General Information: Component: CAS#: 9002-18-0 % by Weight: Agar - 100%	





IV First-Aid Measures

General Information:

Route of Exposure

Oral: Not expected to be a health hazard.

Inhalation: If inhaled, move to fresh air. If breathing becomes difficult, call a physician.

Dermal: Not expected to be a health hazard.

Eye: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

V Fire-Fighting Measures

General Information:

Flammable Properties

General:

Flash Point:

Ignition Temperature:

Sultable Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

Special Protective Equipment for fire fighters: Use protective clothing and breathing equipment appropriate for the surrounding fire.

Additional Information: Not considered to be a fire hazard. Not considered to be an explosion hazard.

VI Accidental Release Measures

General Information: Ventilate area of leak or spill. Wear appropriate personal protective equipment. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

VII Handling and Storage

Handling:

Storage: General storage, keep in a tightly closed container, stored in a cool, dry, ventilated area

Exposure Controls / Personal Protection

General Information:

Engineering Measures:

Personal Protective Equipment

General:

Eye Protection:

Hand Protection:

Respiratory Protection:

Skin and Body Protection:

Hygiene Measures:





General Information:			
Appearance:			
pH:			
Specific Gravity:			
Melting Point:			
Boiling Point:			
Flash Point:			
Flammability Range:			
Vapor Pressure:			
Stability and Reactivity			
General Information:			
Storage Stability			
Temperature: Room Temperature			
Light Sensitive: False			
Incompatibles: Strong oxidizers.			
Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form	when heated to	decomposition.	
Stable under ordinary conditions of use and storage.			
Toxicological Information			
General Information:			
Acute Toxicity: Complete toxicological properties have yet to be determined.			
Chronic Toxicity: Complete toxicological properties have yet to be determined. Local Effects:			
Chronic Toxicity: Complete toxicological properties have yet to be determined.			
Chronic Toxicity: Complete toxicological properties have yet to be determined. Local Effects:			
Chronic Toxicity: Complete toxicological properties have yet to be determined. Local Effects: Target Organs:	1		
Chronic Toxicity: Complete toxicological properties have yet to be determined. Local Effects: Farget Organs: Carcinogenicity: Investigated as a tumorigen.	4		

General Information:

Disposal of Product: Observe all federal, state and local environmental regulations.

Disposal of Packaging: Rinse and dispose according to federal, state and local environmental regulations.



XIV	Transport Information	
	Proper Shipping Name: CHEMICALS, N.O.S (NON-REGULATED)	
	UN#:	
	Class:	
	Packaging Group:	
	Hazard Label:	
ΧV	Regulatory Information	
	General Information:	
	TSCA:	
	SARA 313:	
XVI	Other Information	
	General Information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only guide. Caisson Laboratories, Inc. Shall not be held liable for any damage resulting from handling or from contact with the above	as a

Last Revision Date: 26 Oct, 2015

product.