

SECTION 1 Identification of the substance/mixture and of the company

- 1.1 Product identifier
 - Product Name: Nutrient Agar
 - Product Part Number: 7145
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - Use of the substance/preparation: For the cultivation of a wide variety of
 - microorganisms. Conforms to FDA/BAM formulation.Use advised against: No information available
- 1.3 Details of the supplier of the safety data sheet
 - Name of Manufacturer: Acumedia Manufacturers, Inc.
 - Address of Manufacturer: 740 East Shiawassee Lansing, Michigan 48912
 - USA
 - Telephone: 517/372-9200
 - Email: Foodsafety@neogen.com
- 1.4 Emergency telephone number
 - Emergency Telephone: Chemtrec: (800) 424-9300 Outside USA and Canada: +1 (703) 527-3887

SECTION 2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
 - Not classified as hazardous for supply
 - Classification (67/548/EEC, 1999/45/EC) (OSHA 29 CFR 1910.1200)
 - Not classified as hazardous for supply
 - Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16
- 2.2 Label elements
 - Signal Word: None
 - Symbols: None
 - Hazard phrases
 - None
 - Precautionary Phrases
 Keep container tightly closed.
 Do not breathe dust
 Do not get in eyes, on skin, or on clothing.
- 2.3 Other hazards
 - Mildly irritating to skin and eyes
 - Mildly irritating to respiratory system

SECTION 3 Composition/information on ingredients

- 3.1 Substances
- 3.2 Mixtures
 - This product does not contain any hazardous substances at the concentration limits given in Regulation (EC) No. 1272/2008 and OSHA Hazard Communication Standard 29 CFR 1910.1200



SECTION 4 First aid measures

- 4.1 Description of first aid measures
 - Contact with skin
 - Remove contaminated clothing
 - Wash affected area with plenty of soap and water
 - If skin irritation or rash occurs: Get medical advice/attention.
 - Contaminated clothing should be laundered before reuse
 - Contact with eyes
 - If substance has gotten into eyes, immediately wash out with plenty of water for at least 15 minutes
 - Irrigate eyes thoroughly while lifting eyelids
 - Seek medical advice if necessary
 - Ingestion
 - Rinse mouth with water (do not swallow)
 - Never make an unconscious person vomit or drink fluids
 - If medical advice is needed, have product container or label at hand.
 - Inhalation If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - Call a POISON CENTER or doctor/physician if you feel unwell.
- 4.2 Most important symptoms and effects, both acute and delayed
 - May cause irritation
- 4.3 Indication of any immediate medical attention and special treatment needed
 - Treat symptomatically

SECTION 5 Fire-fighting measures

- 5.1 Extinguishing media
 - In case of fire: use foam, carbon dioxide or dry agent for extinction
- 5.2 Special hazards arising from the substance or mixture
 - Smoke from fires is toxic. Take precautions to protect personnel from exposure
 - Decomposition products may include carbon oxides
 - May form explosive dust/air mixtures
 - See Section 10
- 5.3 Advice for firefighters
 - Keep container(s) exposed to fire cool, by spraying with water
 - Wear chemical protection suit and positive-pressure breathing apparatus
 - Wear protective clothing as per section 8

SECTION 6 Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 - Shut off all ignition sources
 - Use non-sparking hand tools



SECTION 6 Accidental release measures (continued)

- Avoid raising dust
- Remove contaminated clothing
- Wear protective clothing as per section 8
- Wash thoroughly after dealing with spillage
- 6.2 Environmental Precautions
 - Do not allow to enter public sewers and watercourses
 - Avoid scattering in the environment
- 6.3 Methods and material for containment and cleaning up
 - Absorb spillage in inert material and shovel up
 - Place in sealable container
 - Seal containers and label them
 - Seek expert advice for removal and disposal of all contaminated materials and wastes
 - Ventilate the area and wash spill site after material pick-up is complete
- 6.4 Reference to other sections

- See Section 7

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Do not breathe dust
- Avoid contact with skin and eyes
- Do not eat, drink or smoke when using this product.
- Ensure adequate ventilation
- Eyewash bottles should be available
- Wash hands thoroughly after using this substance
- 7.2 Conditions for safe storage, including any incompatibilities
 - Store at temperatures not exceeding 30°C/86°F. Keep cool.
 - Store in a well-ventilated place. Keep container tightly closed.
 - Store in a dry place.
 - Keep away from oxidizing substances
 - Keep away from acid
- 7.3 Specific end use(s)
 - For the cultivation of a wide variety of microorganisms. Conforms to FDA/BAM formulation.

SECTION8 Exposure controls/personal protection

- 8.1 Control parameters
 - There are no recommended or established controls for this product
- 8.2 Exposure controls
 - Eyewash bottles should be available
 - Engineering controls should be provided to prevent the need for ventilation
 - No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask, N95 (US) or type FFP1 (EN143) dust masks.
 - Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - Wear safety glasses approved to standard for NIOSH (US) or EN 166.



SECTION 8 Exposure controls/personal protection (continued)

- Wear suitable protective clothing



SECTION 9 Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - Appearance: Homogenous, free-flowing powder, Beige
 - Odor: No information available
 - pH: Not applicable
 - Melting point/Range: No information available
 - Boiling Point/Range: Not determined
 - Flashpoint: No information available
 - Evaporation Rate: No information available
 - Flammability: No information available
 - Vapor Pressure: No information available
 - Vapor Density: No information available
 - Specific Gravity: No information available
 - Solubility in water: Completely soluble in water
 - Partition Coefficient (n-Octanol/Water): No information available
 - Autoignition Temperature Product is not self-igniting
 - Viscosity: No information available
 - Explosive Properties: Product does not present an explosion hazard
 - Oxidizing Properties: No information available
- 9.2 Other information
 - No information available

SECTION 10 Stability and reactivity

- 10.1 Reactivity
 - No information available
- 10.2 Chemical stability
 - Considered stable under normal conditions
- 10.3 Possibility of hazardous reactions
 - No hazardous reactions known if used for its intended purpose
- 10.4 Conditions to avoid
 - Avoid contact with moisture
 - Keep away from heat and sources of ignition
- 10.5 Incompatible materials
 - Incompatible with oxidizing substances
- 10.6 Hazardous Decomposition Products
 - Decomposition products may include carbon oxides



SECTION 11 Toxicological information

- 11.1 Information on toxicological effects
 - No experimental data available
 - Contact with skin
 - May cause redness and irritation
 - Contact with eyes
 - May cause redness and irritation Ingestion
 - May cause irritation of the throat
 - Inhalation
 - May cause coughing
 - Carcinogenicity
 - No evidence of carcinogenic effects
 - Mutagenicity
 - No evidence of mutagenic effects
 - Teratogenicity
 - No information available

SECTION 12 Ecological information

- 12.1 Toxicity
 - No information available
- 12.2 Persistence and degradability
 - No information available
- 12.3 Bioaccumulation Potential
 - No information available
- 12.4 Mobility in soil
 - No information available
- 12.5 Results of PBT and vPvB assessment
 - Not a PBT according to REACH Annex XIII
 - PBT/vPvB assessment not available
- 12.6 Other Adverse Effects
 - To the best of our knowledge, the properties of this material have not been fully evaluated
 - On available data, substance is not harmful to the environment

SECTION 13 Disposal considerations

- 13.1 Waste treatment methods
 - Disposal should be in accordance with local, state or national legislation
 - Do not discharge into drains or the environment, dispose to an authorized waste collection point
 - Do not reuse empty containers without commercial cleaning or reconditioning
 - Refer to manufacturer/supplier for information on recovery/recycling
- 13.2 Classification (REACH)
 - Waste Codes in accordance with the European Waste catalogue (EWC) are origin-defined. Since this product is used in several industries, no Waste Code can be provided by the supplier. The Waste Code should be determined in arrangement with your waste disposal partner or the responsible authority.





SECTION 14 Transport information

- 14.1 UN Number
- Not classified as hazardous for transport
- 14.2 UN Proper Shipping Name
 - Not applicable
- 14.3 Transport hazard class(es)
 - Not applicable
- 14.4 Packing group
 - Not applicable
- 14.5 Environmental hazards
 - Not Classified
- 14.6 Special precautions for user
 - Not Classified
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code
 - Not Classified
- 14.8 DOT
 - Proper Shipping Name: Not applicable
 - DOT UN No.: Not applicable
 - DOT Hazard Class: Not applicable
 - DOT Packing Group: Not applicable
- 14.9 Road/Rail (ADR/RID)
 - Proper Shipping Name: Not applicable
 - ADR UN No.: Not applicable
 - ADR Hazard Class: Not applicable
 - ADR Packing Group: Not applicable
 - Tunnel Code: Not applicable
- 14.10 Sea (IMDG)
 - Proper Shipping Name: Not applicable
 - IMDG UN No.: Not applicable
 - IMDG Hazard Class: Not applicable
 - IMDG Pack Group .: Not applicable
- 14.11 Air (ICAO/IATA)
 - Proper Shipping Name: Not applicable
 - ICAO Un No.: Not applicable
 - ICAO Hazard Class: Not applicable
 - ICAO Packing Group: Not applicable

SECTION 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
 - This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006-453/2010 and OSHA Hazard Communication Standard 29 CFR 1910.1200.
 - Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- 15.2 Chemical Safety Assessment
 - No information available
- 15.3 United States Regulatory Information



SECTION 15 Regulatory information (continued)

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: The material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 No SARA Hazards

SECTION 16 Other information

This document is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. Neogen Corporation shall not be held liable for any damage resulting from handling or from contact with the above product. These suggestions should not be confused with state, municipal or insurance requirements, and constitute NO WARRANTY.

SAFETY DATA SHEET

FORMALIN FIXED SPECIMENS IN PRESERVED HOLDING SOLUTION – EXCLUDING FETAL PIGS, CATS, GRASSFROGS, BULLFROGS, RABBITS, RATS, MINK



www.ranaco.com

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Recommended Use: Synonyms: Manufacturer/Supplier: General Information: Transportation Emergency Number: Formalin Fixed Specimens In Preserved Holding Solution – Excluding Fetal Pigs, Cats, Grassfrogs, Bullfrogs, Rabbits, Rats, Mink Science education applications None Ranaco Corporation, 4345 E Irvington Road, Tucson, AZ 85714 800-528-7023 800-424-9300 Chemtrec – 24 hours assistance

SECTION 2: HAZARD IDENTIFICATION

DANGER



Targeted organs: Eyes, Skin, Central Nervous System, Respiratory Tract

GHS Classification:

Acute Toxicity, oral (Category 4) Acute Toxicity, dermal (Category 4) Skin Irritation (Category 2) Eye irritation (Category 2A) Skin sensitization (Category 1) Acute toxicity, inhalation (Category 4) Carcinogenicity (Category 2)

Hazard Statements:

Maybe harmful if swallowed. Causes skin irritation. Causes eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause cancer.

Precautionary Statements: Obtain special instructions before use. Wear protective gloves and eye protection. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician IF exposed or concerned: Get medical advice/attention. Store in a well- ventilated place. Keep container tightly closed. Dispose of contents/container in accordance with local/regional/national regulations.

MARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS #	<pre>% > 0.1% - ≤ 0.6% ≤ 0.03% < 9%</pre>	
Formaldehyde	50-00-0		
Methanol	67-56-1		
Propylene Glycol	57-55-6		
Ethylene Glycol Monophenyl Ether	122-99-6	<u><</u> 1%	
Water	7732-18-5	Balance	

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Wash affected area with soap and water. Seek medical attention if symptoms develop.

EYE CONTACT: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Seek medical attention if irritation persists.

INHALATION: Remove to fresh air. Get medical treatment if symptoms persist.

INGESTION: Immediately call a POISON CENTER or physician. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of skin, eyes, respiratory tract. Repeated exposure may cause dermatitis or other allergic reactions.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use dry chemical, CO2, water spray (fog) or alcohol foam.

FIRE FIGHTING METHODS AND PROTECTION: Firefighters should wear self-contained breathing apparatus and wear full protective equipment.

FIRE AND/OR EXPLOSION HAZARDS: During a fire, smoke generated can be irritating or toxic.

HAZARDOUS COMBUSTION PRODUCTS: Products of combustion include but are not limited to carbon monoxide and carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid breathing vapors. Use gloves and eye protection to clean up spills.

EMERGENCY PROCEDURES: Ventilate area of spill. Eliminate all sources of ignition. Remove non-essential personnel.

ENVIRONMENTAL PRECAUTIONS: No special hazards. Follow applicable federal, state, provincial and local regulations regarding releases.

METHODS FOR CONTAINMENT AND CLEAN-UP: Absorb with liquid binding material and place in a sealed container. Dispose of waste in accordance with federal, state, provincial and local regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Do not eat, drink or smoke when using this product. Avoid breathing vapors. Avoid direct skin or eye contact with liquids. Do not ingest. Wash hands with soap and water after use or handling of product.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store at room temperature in a dry well ventilated area. Keep specimen container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Formaldehyde	C 0.3 ppm / C 0.37 mg/m ³	TWA: 0.75 ppm / STEL: 2ppm	TWA: 0.016 ppm / STEL: 0.1 ppm
Methanol	TWA: 200 ppm / STEL: 250 ppm	TWA: 200 ppm / STEL: 260 ppm	TWA: 200 ppm / STEL: 250 ppm
Ethylene Glycol Monophenyl Ether N	Not available	Not available	Not available
· · · · · · · · · · · · · · · · · · ·	WEEL		
Propylene Glycol	TWA 10 mg/m ³ Aerosol	Not available	Not available

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility, a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles or face shield, apron and appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory Protection: None should be needed in normal handling and room temperatures. If use conditions generate fumes above the OSHA regulations, use of a NIOSH/MSHA approved respirator is required.

ACGIH: American Conference of Industrialist Hygienists, OSHA: U.S. Occupational Safety and Health Administration, NIOSH: U.S. National Institute for Occupational Safety and Health, PEL: Permissible Exposure Limit, TWA: Time Weighted Average, STEL: Short Term Exposure Limit, REL: Recommended Exposure Limit, WEEL: Workplace Environmental Exposure Limit

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Specimen with/without clear colorless liquid	Vapor Pressure (mmHg):
Odor: Mild pungent odor	Vapor Density: Data not a
Odor Threshold: Data not available	Relative Density (Specific
pH: Data not available	Solubility(ies): Complete i
Melting/Freezing Point: Data not available	Partition Coefficient: Data
Boiling Point: Data not available	Auto-ignition Temperatu
Flash Point: Data not available	Decomposition Temperat
Evaporation Rate (Water = 1) : >1	Viscosity: Data not availal
Flammability (solid/gas): Data not available	Molecular Formula: Mixtu
Explosion Limits: Lower/Upper: Data not available	Molecular Weight: Mixtu

: Data not available available ic Gravity): >1 in water ita not available ure: Data not available ature: Data not available able ture ure

SECTION 10: STABILITY & REACTIVITY

Reactivity: None under normal conditions. Chemical Stability: Stable

Conditions to Avoid: Excessive temperatures which cause evaporation.

Incompatible Materials: Strong acids, phenol, strong oxidizers, strong bases, hydrochloric acid, ammonia, iodine, alkalies, tannin, iron products, gelatin, bisulfate Hazardous Polymerization: None under normal conditions.

Hazardous Decomposition Products: May include, but are not limited to carbon monoxide, carbon dioxide, gaseous formaldehyde, aldehydes, ketones, alcohols, ethers and organic acids

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Formalin Fixed Specimens in Preserved Holding Solution have not been tested as a mixture. Information about individual components is supplied.

Formaldehyde - Oral-rat LD50: 100 mg/kg; Inhalation-rat LC50: 250 ppm/4 hours; Dermal-rat: 270 mg/kg

Methanol - Oral-rat LD50: 5,600 mg/kg; Inhalation-rat LC50: 6,400 ppm/4 hours, 145,000 ppm/ 1 hour; Dermal-rat: 15,800 mg/kg

Propylene Glycol – Ingestion-rat LD50: > 20,000 mg/kg; Skin absorption-rabbit LD50: > 20,000 mg/kg

Ethylene Glycol Monophenyl Ether- Oral-rat LD50: 1,840 mg/kg; Dermal-rabbit: >2,214 mg/kg

Chronic Effects: Data not available.

Skin Corrosion/Irritation:

Causes skin irritation. May cause an allergic skin reaction.

Serious Eye Damage/Irritation:

Causes eye irritation or damage.

Respiratory or Skin Sensitization:

May cause sensitization by skin contact

Germ Cell Mutagenicity: Data not available.

Carcinogenicity: Data not available. Information about individual components is supplied.

Formaldehyde - Classified as a carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) and OSHA. CA Prop 65: Formaldehyde is known to the State of California to cause cancer.

Reproductive Toxicity: Data not available. Information about individual components is supplied.

Methanol - CA Prop 65: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Specific Target Organ Toxicity - Single exposure: Data not available.

Specific Target Organ Toxicity- Repeated exposure: Data not available.

Aspiration Hazard: Data not available.

Potential Health Effects:

Inhalation: May cause respiratory irritation.

Ingestion: May be harmful if swallowed.

Skin: May cause skin irritation. May cause an allergic skin reaction.

Eyes: May cause eye irritation or damage.

Signs and Symptoms of Exposure:

The chemical, physical and toxicological properties have not been thoroughly investigated for this product/mixture. Specific data is not available. Exercise appropriate procedures to minimize hazards.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish: No data available.

 Toxicity to daphnia and other aquatic invertebrates: No data available.

 Toxicity to algae: No data available.

 Persistence and degradability: No data available.

 Bioaccumulative potential: No data available.

 Mobility in soil: No data available.

 PBT and vPvB assessment: No data available.

 Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 14: TRANSPORTATION INFORMATION (US DOT /CANADA TDG)

UN/NA Number: Not applicable Hazard Class: Not applicable Exceptions: Not applicable Shipping Name: Not regulated Packing Group: Not applicable 2012 ERG Guide#: Not applicable

Reportable Quantity: No

Marine Pollutant: No

SECTION 15: REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Component	TSCA	CERLCA (RQ)	RCRA CODE	DSL	NDSL	WHMIS CLASSIFICATION
Formaldehvde	Listed	100 lbs (45.4 kg)	U122	Listed	Not Listed	D1A; D2A; D2B
Methanol	Listed	5,000 lbs (2,270 kg	U154	Listed	Not Listed	B2; D1B; D2A; D2B
Propylene Glycol	Listed	None	None	Listed	Not Listed	None
Ethylene Glycol Monophenyl Ether	Listed	None	None	Listed	Not Listed	B3

California Proposition 65 Information:

WARNING: This product can expose you to chemicals including formaldehyde, which is known to the State of California to cause cancer, and methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

Date Prepared: July 23, 2018

Supersedes: April 24, 2018

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