

EMS CATALOG NO: 10200  
EMS PRODUCT: AGAR, POWDER  
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MATERIAL SAFETY DATA SHEET

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ELECTRON MICROSCOPY SCIENCES  
1560 Industry Road  
P.O. Box 550  
Hatfield, PA 19440  
(215) 412-8400

24 HOUR EMERGENCY PHONE NUMBER  
CHEMTREC: (800) 424-9300

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FOR PRODUCT AND SALES INFORMATION

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CONTACT ELECTRON MICROSCOPY SCIENCES OFFICE ABOVE.

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PRODUCT IDENTIFICATION

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COMMON NAME: Agar  
COMMERCIAL NAME(S): Not available.  
SYNONYM: Polysaccharide Complex  
CHEMICAL NAME: Not available.  
CHEMICAL FAMILY: Not available.  
CHEMICAL FORMULA: Not available.  
CAS#: 9002-18-0  
RTECS: AW7950000  
TSCA: TSCA 8(b) INVENTORY: Agar-Agar  
CI#: Not available.

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COMPOSITION AND INFORMATION ON INGREDIENTS

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NAME: Agar  
CAS#: 9002-18-0

% BY WEIGHT: 100

TOXICOLOGICAL DATA ON INGREDIENTS:

ORAL (LD50): Acute 11000 mg/kg [Rat].

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HAZARDS IDENTIFICATION

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POTENTIAL ACUTE HEALTH EFFECTS:

Slightly hazardous in case of eye contact (irritant), of ingestion.

POTENTIAL CHRONIC HEALTH EFFECTS:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

The substance is toxic to lungs. Repeated or prolonged exposure to the substance can produce target organs damage.

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FIRST AID MEASURES

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EYE CONTACT: Check for and remove any contact lenses, immediately Flush eyes with plenty of water for at least 15 minutes. Get medical Attention if irritation occurs.

SKIN CONTACT: Immediately flush skin with plenty of water. Remove Contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

SERIOUS SKIN CONTACT: Not available.

INHALATION: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

SERIOUS INHALATION: Not available.

INGESTION: Do NOT induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

SERIOUS INGESTION: Not available.

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FIRE AND EXPLOSION DATA

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FLAMMABILITY OF THE PRODUCT: May be combustible at high temperature.  
AUTO-IGNITION TEMPERATURE: Not available.  
FLASH POINTS: Not available.  
FLAMMABLE LIMITS: Not available.  
PRODUCTS OF COMBUSTION: Not available.  
FIRE HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES: Not available.

EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES:  
RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF MECHANICAL IMPACT: Not available.  
RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF STATIC DISCHARGE: Not available.  
FIRE FIGHTING MEDIA AND INSTRUCTIONS:  
SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.  
SPECIAL REMARKS ON FIRE HAZARDS: Not available.  
SPECIAL REMARKS ON EXPLOSION HAZARDS: Not available.

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#### ACCIDENTAL RELEASE MEASURES

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SMALL SPILL:  
Use appropriate tools to put the spilled solid in a convenient water disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

LARGE SPILL:  
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

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#### HANDLING AND STORAGE

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PRECAUTIONS:  
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.

STORAGE:  
Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly

closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

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#### EXPOSURE CONTROLS/PERSONAL PROTECTION

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##### ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

PERSONAL PROTECTION: Safety glasses. Lab coat.

PERSONAL PROTECTION IN CASE OF A LARGE SPILL: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

EXPOSURE LIMITS: Not available.

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#### PHYSICAL AND CHEMICAL PROPERTIES

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PHYSICAL STATE AND APPEARANCE: Solid  
ODOR:Odorless  
TASTE: Not available.  
COLOR: Not available.  
MOLECULAR WEIGHT: Not available.  
pH (1% SOLN/WATER): Not applicable.  
BOILING POINT: Not available.  
MELTING POINT: Decomposes.  
CRITICAL TEMPERATURE: Not available.  
SPECIFIC GRAVITY: Not available.  
VAPOR PRESSURE: Not applicable.  
VAPOR DENSITY: Not available.  
VOLATILITY: Not available.  
ODOR THRESHOLD: Not available.  
WATER/OIL DIST. COEFF.: Not available.  
IONICITY (IN WATER): Not available.  
DISPERSION PROPERTIES: Not available.  
SOLUBILITY: Insoluble in cold water.

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#### STABILITY AND REACTIVITY DATA

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STABILITY: The product is stable.  
INSTABILITY TEMPERATURE: Not available.  
CONDITIONS OF INSTABILITY: Not available.  
INCOMPATIBILITY WITH VARIOUS SUBSTANCES: Not available.  
CORROSIVITY: Not available.  
SPECIAL REMARKS ON REACTIVITY: Not available.  
SPECIAL REMARKS ON CORROSIVITY: Not available.  
POLYMERIZATION: No.

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#### TOXICOLOGICAL INFORMATION

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ROUTES OF ENTRY: Not available.  
TOXICITY TO ANIMALS: Acute oral toxicity (LD50): 11000 mg/kg [Rat].  
CHRONIC EFFECTS ON HUMANS: The substance is toxic to lungs.  
OTHER TOXIC EFFECTS ON HUMANS: Slightly hazardous in case of ingestion, of inhalation.  
SPECIAL REMARKS ON TOXICITY TO ANIMALS: Not available.  
SPECIAL REMARKS ON CHRONIC EFFECTS ON HUMANS: Not available.  
SPECIAL REMARKS ON OTHER TOXIC EFFECTS ON HUMANS: Not available.

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#### ECOLOGICAL INFORMATION

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ECOTOXICITY: Not available.  
BOD5 AND COD: Not available.  
PRODUCTS OF BIODEGRADATION: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.  
TOXICITY OF THE PRODUCTS OF BIODEGRADATION: Not available.  
SPECIAL REMARKS ON THE PRODUCTS OF BIODEGRADATION: Not available.

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#### DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL: Recycle to process, if possible. Consult your local or regional authorities.

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#### TRANSPORT INFORMATION

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DOT CLASSIFICATION: Not a DOT controlled material (United States).

IDENTIFICATION: Not applicable.

SPECIAL PROVISIONS FOR TRANSPORT: Not applicable.

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OTHER REGULATORY INFORMATION

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FEDERAL AND STATE REGULATIONS: TSCA 8(b) INVENTORY: Agar-Agar

OTHER REGULATIONS:

OSHA: Hazardous by definition of Hazard Communication  
Standard (29 CFR 1910.1200)

OTHER CLASSIFICATIONS:

WHMIS (CANADA): CLASS D-2A: Material causing other toxic  
effects (VERY TOXIC).

DSCLA (EEC): This product is not classified according to the  
EU regulations.

HMIS (U.S.A.):

HEALTH HAZARD: 1  
FIRE HAZARD: 1  
REACTIVITY: 0  
PERSONAL PROTECTION: a

NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)

HEALTH: 1  
FLAMMABILITY: 1  
REACTIVITY: 0  
SPECIFIC HAZARD:

PROTECTIVE EQUIPMENT:

Lab coat.

Wear appropriate respirator when ventilation is inadequate.

Safety glasses.