



SAFETY DATA SHEET

AS-1161

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Bushnell-Haas Agar

Prepared in accordance with Safe Work Australia GHS-based SDS requirements

Document Control

Version 1.0 · Reviewed 31 August 2025

Technical Review

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SECTION 1: Identification

Product Name	Bushnell-Haas Agar
Synonyms	Bushnell-Haas Medium
Catalogue Number	AS-1161
Recommended Use	Dehydrated microbiological culture medium — laboratory use only
Manufacturer	AuSaMicS Pty Ltd, Melbourne, Victoria, Australia
ABN	56 676 640 467
Emergency Contact	See www.ausamics.com.au for current contact details

SECTION 2: Hazard(s) Identification

Classification: The dehydrated medium is not classified as hazardous according to the criteria of Safe Work Australia (GHS 7th revision, as adopted in Australia). Not classified as a Dangerous Good under the Australian Dangerous Goods (ADG) Code.

Signal Word	None allocated
Hazard Statements	None allocated
Precautionary Statements	None allocated
Pictograms	Not applicable — product is not classified as hazardous; no GHS pictograms are required for this SDS

Important: any hydrocarbon supplement added by the user (mineral oil, kerosene, diesel, petrol, etc.) is NOT covered by this SDS and carries its own hazards (flammability, inhalation risk, environmental hazard). Refer to the specific SDS for whichever hydrocarbon is used with this medium.

SECTION 3: Composition / Information on Ingredients

Component	CAS No.	Concentration (w/w)
Agar	9002-18-0	≈ 86%
Magnesium Sulfate Heptahydrate (MgSO ₄ ·7H ₂ O)	10034-99-8	≈ 0.9%



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Calcium Chloride, anhydrous (CaCl ₂)	10043-52-4	≈ 0.1%
Monopotassium Phosphate (KH ₂ PO ₄)	7778-77-0	≈ 4.3%
Dipotassium Phosphate (K ₂ HPO ₄)	7758-11-4	≈ 4.3%
Ammonium Nitrate (NH ₄ NO ₃)	6484-52-2	≈ 4.3%
Ferric Chloride Hexahydrate (FeCl ₃ ·6H ₂ O)	10025-77-1	≈ 0.2%

SECTION 4: First-Aid Measures

Route	First-Aid Response
Inhalation	Move to fresh air. If irritation persists, seek medical attention.
Skin Contact	Wash affected area with soap and water.
Eye Contact	Rinse thoroughly with water for at least 15 minutes, lifting eyelids. Seek medical advice if irritation persists.
Ingestion	Rinse mouth with water. Do not induce vomiting. Seek medical advice if unwell.

SECTION 5: Fire-Fighting Measures

Suitable Extinguishing Media	Water spray, foam, dry chemical, or carbon dioxide — the dehydrated medium itself is not flammable
Specific Hazards	Ammonium nitrate component is an oxidiser; avoid contact with combustible materials in bulk storage. Combustion of organic/nitrate dust may produce oxides of nitrogen
Protective Equipment	Self-contained breathing apparatus recommended for fire-fighters in enclosed spaces

SECTION 6: Accidental Release Measures

- Avoid generating dust; ventilate the area.
- Wear appropriate personal protective equipment (see Section 8).
- Sweep or vacuum spilled material; avoid dry sweeping that generates dust.
- Place into a suitable, labelled container for disposal (see Section 13).
- Wash the spill area with water after collection.

SECTION 7: Handling and Storage



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Handling	Avoid generating dust. Use with adequate ventilation. Avoid contact with eyes and prolonged skin contact. Wash hands after handling. Keep away from combustible materials due to the oxidising nature of ammonium nitrate.
Storage (Dehydrated)	Store at 10–30°C in a tightly closed container, protected from moisture, light, and combustible materials.
Storage (Prepared Plates)	Store at 2–8°C, inverted. Use within 2 weeks of preparation.
Incompatible Materials	Ammonium nitrate component: avoid strong reducing agents, combustible materials, and excessive heat.

SECTION 8: Exposure Controls / Personal Protection

Exposure Limits	No specific workplace exposure standard established for this product; treat as nuisance dust (Safe Work Australia default: 10 mg/m ³ inspirable dust, 8-hr TWA)
Engineering Controls	Use in a well-ventilated area; local exhaust ventilation where dust generation is significant
Eye Protection	Safety glasses recommended when handling dehydrated powder
Skin Protection	Laboratory gloves recommended
Respiratory Protection	Not normally required; use a dust mask if handling large quantities or in poorly ventilated areas

SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	Fine, homogeneous, free-flowing powder
Odour	Odourless to slight
pH (prepared medium, 25°C)	7.0 ± 0.2
Solubility in Water	Disperses on boiling; forms a firm gel on cooling. White precipitate turns yellow-orange after autoclaving (normal)
Flammability	Not flammable; ammonium nitrate component is an oxidiser
Melting/Decomposition	Not determined for the mixture

SECTION 10: Stability and Reactivity

Chemical Stability	Stable under recommended storage conditions
Conditions to Avoid	Excessive heat, moisture, direct sunlight, contact with combustible materials



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Incompatible Materials

Strong reducing agents, combustible organic materials (due to ammonium nitrate oxidiser component)

Hazardous Decomposition Products

Oxides of nitrogen may form on combustion or strong heating

SECTION 11: Toxicological Information

No specific toxicological data are available for this product as a mixture. Individual components are laboratory-grade inorganic salts and agar with no known significant acute or chronic toxicity under normal conditions of laboratory use. May cause mechanical irritation to eyes and respiratory tract as a fine powder. This SDS does not address hazards of any hydrocarbon supplement added by the user.

SECTION 12: Ecological Information

The dehydrated medium is composed of biodegradable agar and inorganic mineral salts. No specific ecotoxicological data are available for the mixture. Avoid uncontrolled discharge of prepared medium, particularly once hydrocarbon supplements have been added, into waterways or sewer systems.

SECTION 13: Disposal Considerations

- Dehydrated medium: dispose of as general solid waste in accordance with local council/EPA requirements, or via approved laboratory waste contractor.
- Prepared/inoculated plates (with hydrocarbon added): treat as hydrocarbon-contaminated waste and dispose of per your institution's chemical/biosafety waste procedures — do not discharge to sewer.
- Sterilise inoculated cultures by autoclaving before disposal where biological containment is required.

SECTION 14: Transport Information

UN Number	Not applicable — the dehydrated medium is not classified as a Dangerous Good
Proper Shipping Name	Not applicable
Transport Hazard Class	Not applicable
Packing Group	Not applicable
Special Precautions	None for the dehydrated medium — transport as a general laboratory chemical/reagent

SECTION 15: Regulatory Information

This product is not classified as hazardous under the Work Health and Safety (WHS) Regulations and the Globally Harmonized System (GHS) as adopted by Safe Work Australia. Not listed as a Scheduled substance under the Poisons Standard (SUSMP). Not subject to the Australian Dangerous Goods (ADG) Code for transport. Note that ammonium nitrate



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is subject to security and storage considerations in some jurisdictions when held in bulk quantities; confirm local requirements for large-volume storage.

SECTION 16: Other Information

Preparation Date	Refer to document issue date on cover
SDS Version	1.0
Prepared By	AuSaMicS Pty Ltd, Technical Department

This Safety Data Sheet has been prepared in accordance with Safe Work Australia's Code of Practice for Preparing Safety Data Sheets for Hazardous Chemicals, adapted for a non-hazardous laboratory culture medium. Information is provided in good faith and is believed accurate as at the date of issue; it does not constitute a warranty of any kind. Users must evaluate suitability for their own conditions of use, and must separately assess the hazards of any hydrocarbon supplement they add.

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