

Safety Data Sheet


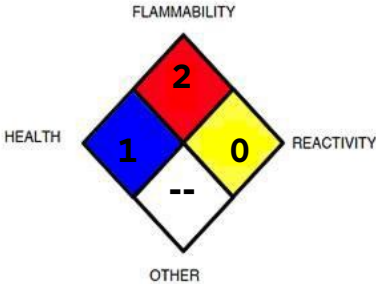
Section 1: Product & Company Identification

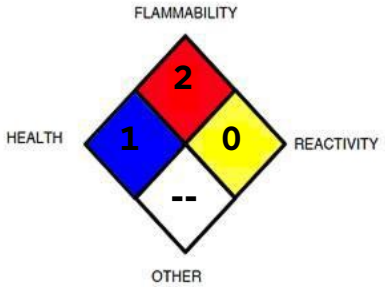
Product Name:	NHS-Activated Agarose 4B-CL
Product #:	N-2741
Synonyms:	-
Supplier:	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
Emergency Tele#:	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Isopropanol	67-63-0	200-661-7	100

Section 3: Hazards Identification

Symbols	
HMIS Classification	<p>FLAMMABILITY</p>  <p>HEALTH REACTIVITY</p> <p>OTHER</p>

NFPA Classification	
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Section 4: First Aid Measures

General Overview:	Consult a physician if symptoms are severe or persistent. Provide this data sheet to medical personnel. If product is spilled or leaked, evacuate area.
Inhalation:	If inhaled, move person to fresh air and monitor breathing. If not breathing, give artificial ventilation. Consult a physician if symptoms are severe or persistent.
Skin:	Immediately wash with excess soap and water. If spilled on clothing, remove all affected clothing. Consult a physician if symptoms are severe or persistent.
Eyes:	Flush eyes with water or eye wash solution as a precaution for 15 minutes. Consult a physician if symptoms are severe or persistent.
Ingestion:	Only induce vomiting if recommended by medical personnel. If subject is unconscious, do not give anything by mouth. If conscious, rinse mouth with water. Consult a physician if symptoms are severe or persistent.
	See section 11 for more detailed information on health effects & symptoms.

SECTION 5: Fire Fighting Measures

Flammability of the product:	Flammable
Extinguishing Media:	Water spray, alcohol-resistant foam, dry chemical, and carbon dioxide extinguishers are suitable. DO NOT use water jet.
Hazardous thermal (de)composition products:	Carbon oxides
Special Fire Fighting Procedures:	Wear protective gear, such as self-contained breathing apparatus, if necessary.
Flash Point:	No data available

Section 6: Accidental Release Measures




Personal Precautions:	Provide suitable ventilation. Use any necessary personal protective equipment. Avoid contact with skin and eyes, and avoid creation and inhalation of vapor or dust. Keep all unnecessary personnel away.
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Environmental Precautions:	Prevent product from entering public sewers and waterways.
Methods for Clean-up:	Use inert absorbent material to absorb any spilled or leaked product and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: Handling & Storage

Storage:	Store upright, closed container in arid, ventilated environment. Storage temperature: 2 - 8°C.
Handling:	Provide suitable ventilation. Store and use away from heat, sparks, open flame, or any other ignition source. Use explosion-proof electrical (ventilating, lighting, and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Wear any necessary personal protective equipment.

SECTION 8: Exposure controls / Personal Protection

Respiratory Protection:	 <p>Use only approved respirators and components which comply with CDC and NIOSH (US) or CEN (EU) regulations. Required only when vapors or aerosols are created.</p>
Skin and Body:	  <p>Use gloves when handling product. Inspect gloves before use to ensure suitability for use. Remove without exposing skin to the gloves outer surface. Discard used gloves according to all pertinent laws and/or current good practices (cGXP). Wash hands with soap and water.</p> <p>Wear appropriate clothing. Ensure clothing is in good condition, with</p>

	no holes or tears. When selecting clothing, consider the concentration and amount of substance to be handled.
Eyes:	 <p>Use only government-approved safety glasses with side-shields.</p>
Ventilation/Engineering Measures:	Prevent product from entering the environment, especially through public sewers or waterways.
Hygiene:	Handle in accordance with good industrial hygiene and safety practice.
Other:	<p>Control Parameters: Isopropyl Alcohol (CAS 67-63-0)</p> <p>TWA: 200 ppm. Basis: USA. ACGIH Threshold Limit Values (TLV). Remarks: Central nervous system impairment, upper respiratory tract irritation, eye irritation, substances for which there is a Biological Exposure Index or Indices (see BEI section), not classifiable as a human carcinogen.</p> <p>STEL: 400 ppm. Basis: USA. ACGIH Threshold Limit Values (TLV). Remarks: Central nervous system impairment, upper respiratory tract irritation, eye irritation, substances for which there is a Biological Exposure Index or Indices (see BEI section), not classifiable as a human carcinogen.</p> <p>TWA: 400.000000 ppm, 980.000000 mg/m³. Basis: USA. Occupational Exposure Limits (OSHA) -Table Z-1 Limits for Air Contaminants. Remarks: The value in mg/m³ is approximate.</p> <p>TWA: 400.000000 ppm, 980.000000 mg/m³. Basis: USA. NIOSH Recommended Exposure Limits.</p> <p>ST: 500.000000 ppm, 1,225.000000 mg/m³. Basis: USA. NIOSH Recommended Exposure Limits.</p> <p>PEL: 400 ppm, 980 mg/m³. Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107).</p> <p>STEL: 500 ppm, 1,225 mg/m³. Basis: California permissible exposure limits for chemical contaminants (Title 8, Article 107).</p>

SECTION 9: Physical and Chemical Properties

Appearance & Odor:	Liquid suspension
Formula	Isopropanol, CAS 67-63-0 (C ₃ H ₈ O)
Molecular Wt.	60.10
Melting Pt.	N/A
Boiling Pt.	N/A
Density:	N/A
Vapor Pressure:	N/A
Evaporation Rate:	N/A
Vapor Density:	N/A
Solubility:	N/A
Flash Point:	N/A
Autoignition Temp:	N/A

SECTION 10: Stability and Reactivity

Stability:	Product is stable when stored and used as recommended.
Hazardous decomposition products:	N/A
Materials to Avoid:	Strong oxidizing agents are incompatible with this product.
Conditions to avoid:	Avoid all possible sources of ignition (spark or flame).

SECTION 11: Toxicological Information

RTECS#:	N/A
ACUTE Toxicity:	Isopropanol LD50 Oral = 5,000 mg/kg (Rat) LD50 Dermal = 12,800 mg/kg (Rabbit)
CHRONIC Toxicity:	N/A
Chronic Exposure: Carcinogen: Mutagen: Teratogen: Reproductive:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.

	EPA: No classification on carcinogenic data is available from EPA
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SECTION 12: Ecological Information

Ecotoxicity:	Aquatic Toxicity Species: Crangon crangon (Common Shrimp). Exposure: 48 hours. Results: LC50 1,400,000 to 1,950,000 µg/L. Species: Gambusia affinis (Western Mosquitofish). Exposure: 96 hours. Results: LC50 1,400,000 µg/L.
Mobility:	No data available
Persistence and degradability:	Photolysis: 95% (21 days)
Bioaccumulative potential:	Low bioaccumulative potential.
Other adverse effects:	No data available
Corrosivity Characteristic:	No data available
General Notes:	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION 13: Disposal Considerations

Residue Waste or Unused product:	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult and adhere to local, regional, and national hazardous waste regulations to ensure complete and accurate classification
Contaminated Packaging:	Packaging should be disposed of in the same manner as unused product.

SECTION 14: Transportation Information

UN ID#:	1219
ADR / RID (LAND):	Not regulated
DOT regulations:	UN#: 1219 Class: 3 Packing Group: II Proper Shipping Name: Isopropanol
IMDG/IMO (SEA):	UN#: 1219 Class: 3 Packing Group: II EMS-No: F-E, S-D Proper Shipping Name: Isopropanol
IATA/DGR (AIR):	UN#: 1219 Class: 3 Packing Group: II

	Proper Shipping Name: Isopropanol
Special Provisions:	N/A

SECTION 15: Regulatory Information

Health Phrases:	<p>Danger</p> <p>H225 - Highly flammable liquid and vapor.</p> <p>H319 - Causes serious eye irritation.</p> <p>H336 - May cause drowsiness or dizziness.</p>
Risk Phrases:	<p>P280 - Wear protective gloves/eye protection/face protection.</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P241 - Use explosion-proof electrical, ventilating, lighting, and all material-handling equipment.</p> <p>P304+340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P303+361+353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P235 - Keep cool.</p> <p>P501 - Dispose of contents and container in accordance with all local, regional, national, and international regulations.</p>
Safety Phrases:	N/A
EU Regulations:	N/A
US Regulations:	<p>TSCA: Not listed</p> <p>California Proposition 65: No products were found</p> <p>Massachusetts State Right to Know: Isopropanol (CAS 67-63-0)</p> <p>New Jersey State Right to Know: Isopropanol (CAS 67-63-0)</p> <p>Pennsylvania State Right to Know: Isopropanol (CAS 67-63-0)</p>
U.S. Federal Regulations:	<p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution-chemical inventory-hazard identification: Fire Hazard, Acute Health Hazard, Chronic Health Hazard</p> <p>SARA 313 toxic chemicals notification and release reporting: Isopropanol (CAS 67-63-0)</p> <p>Clean Water Act (CWA) 307: No products were found.</p> <p>Clean Water Act (CWA) 311: No products were found.</p> <p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: Flammable Liquids (Cat. 2); Eye Irritation (Cat. 2); Single Target Organ Toxicity - Single Exposure (Cat. 3)</p>
WHMIS (Canada):	N/A



SECTION 16: Other Information

LIABILITY STATEMENT: *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*