SouthernBiotech



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

GHS Product Identifier	Mouse Anti-His-Tag-AP
Other means of identification	SB194b
Product type	Liquid
Product code	4603-04
Chemical formula	Not applicable
CAS No	Not applicable
SDS No.	2234138
Relevant Identified uses of the substance or mixture and uses	
advised against	Not applicable
Supplier's details	Southern Biotechnology Associates, Inc. 160 Oxmoor Boulevard Birmingham, Alabama 35209 USA Tel: (205) 945-1774 Fax: (205) 945-8768 Website: www.southernbiotech.com
Distributor and Emergency Phone No.	Refer to website for distributor and emergency phone numbers. Tel: (205) 945-1774

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture GHS-US classification Not classified

Label elements GHS-US labeling Hazard pictograms (GHS-US)

Hazard pictograms (GHS-US)	None required
Signal word (GHS-US)	None required
Hazard statements (GHS-US)	None required
Precautionary statements (GHS-US)	None required
Other hazards	Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or plumbing copper. Sodium azide is rapidly absorbed through skin.
Note	According to OSHA Hazard Communications Standard (CFR 1910.1200), if a mixture contains less than 1% hazardous chemical or less than 0.1% of a carcinogen, the mixture is not considered hazardous. However, precautions for handling potentially dangerous chemicals should be used when handling these products.
Unknown acute toxicity (GHS US)	No data available

Full text of H-phrases: see section 16

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture

CAS Number

Mixture

0	t	he	er	Means	0	f	Ide	nt	ific	ati	ion
_		_									

CAS Number/other identifiers

Not applicable

Not available

Ingredient Name	Product Identifier	Percent	GHS Classification
Glycerol	(CAS No.) 56-81-5 / [EINECS(EC#)] 200-289-5	50	Not Classified
Sodium Azide	(CAS No.) 26628-22-8 / [EINECS(EC#)] 247-852-1	< 0.1	H300 H310 H400 H410

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. See Section 16 for full text of GHS classifications.

SECTION 4: FIRST-AID MEASURES

Description of first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
First-aid measures after eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
First-aid measures after inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
First-aid measures after skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
First-aid measures after ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician.
Most important symptoms and effects, both acute and delayed	See Sections 2 and 11
Indication of immediate medical attention and special treatment needed, if necessary	Contains low levels of sodium azide. Medical conditions could be aggravated by exposure. None known or reported. Treat symptomatically.

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SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media Unsuitable extinguishing media Special hazards arising from the substance or mixture

Hazardous thermal decomposition products Special protective actions for firefighters

Special protective equipment for firefighters

Use an extinguishing agent suitable for the surrounding fire. None known

In a fire or if heated, a pressure increase will occur and the container may burst.

No specific data

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

General measures: This product contains a material of biological origin. Use universal precautions during clean up procedures. Avoid breathing (vapor, mist). Use only in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment, see section 8.

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Reference to other sections

See Section 1 for emergency contact information, Section 13 for waste disposal, and Section 8 for exposure controls and personal protection.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Hygiene measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

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Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Technical measures: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Avoid strong oxidizers. Recommended storage temperature: 2 - 8°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Sodium Azid	le (26628-22-8)		
USA NIOSH	NIOSH IDLH	Ceiling: 0.3 mg/m ³ NaN ₃ Ceiling: 0.1 ppm HN ₃	
USA OSHA OSHA PEL (TWA)		Absorbed through skin (Vacated) Ceiling: 0.3 mg/m ³ NaN ₃ (Vacated) Ceiling: 0.1 ppm HN ₃	
ACGIH TLV ACGIH TLV		Ceiling: 0.29 mg/ m ³ NaN ₃ Ceiling: 0.11 ppm Hydrazoic acid vapor	
Glycerol (56-	-81-5)		
USA OSHA OSHA PEL (TWA) (mg/m³) Respirable Fraction		Respirable Fraction 5 mg/m ³	
USA OSHA OSHA PEL (TWA) (mg/m ³) Total Dust		Total Dust 15 mg/m ³	

Exposure controls General ventilation systems should be sufficient to control worker exposure to Appropriate engineering controls airborne contaminants; showers and evewash stations Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. Personal protective equipment Protective goggles, gloves Hand protection Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Personal protective equipment for the body should be selected based on the Body protection task being performed and the risks involved and should be approved by a specialist before handling this product. Other skin protection Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Tightly fitting safety goggles complying with an approved standard should be Eye protection used when a risk assessment indicates this is necessary to avoid exposure to Rev. 30-Aug-21

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Respiratory protection	protection should be w protection: safety glass Where risk assessment full-face respirator with 14387) respirator cartr respirator is the sole m Use respirators and con	gases or dusts. If contact is possible, t yorn, unless the assessment indicates ses with side-shields. shows air-purifying respirators are ap n multi- purpose combination (US) or idges as a backup to engineering cont eans of protection, use a full-face sup mponents tested and approved under such as NIOSH (US) or CEN (EU).	a higher degree of propriate use a type ABEK (EN rols. If the plied air respirator.
Conditions to avoid	No specific data		
Incompatible materials	No specific data		
Hazardous decomposition pr	roducts Under normal condition products should not be	ns of storage and use, hazardous decc produced.	omposition
Other information	When using, do not eat	t, drink, or smoke. May contain mater	rial of animal origin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

mormation on basic physical and chemical properties				
Physical state	:	Liquid		
Color	:	Colorless		
Odor	:	Not available		
Odor threshold	:	Not available		
рН	:	≈8.0		
Melting point	:	Not available		
Boiling point	:	Not available		
Flash Point	:	Not available		
Burning time	:	Not applicable		
Burning rate	:	Not applicable		
Evaporation rate	:	Not available		
Flammability (solid, gas)	:	Not available		
Lower and upper explosive (flammab	le) limits :	Not available		
Vapor pressure	:	Not available		
Vapor density	:	Not available		
Relative density	:	Not available		
Solubility	:	Soluble in the following materials: cold water and hot water.		
Partition coefficient n-octanol/water	:	Not available		
Auto-ignition temperature	:	Not available		
Decomposition temperature	:	Not available		
SADT	:	Not available		
Viscosity	:	Not available		
Other information	No additional	information available		

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.
Chemical Stability	The product is stable under recommended storage conditions.
Possibility Of Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions To Avoid	No specific data.
Incompatible Materials	Acids, metals. (Note: Over a period of time, sodium azide may react with copper, lead, brass, or solder in plumbing systems to form an accumulation of HIGHLY EXPLOSIVE compounds of lead azide and copper azide.)
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Hazardous Decomposition Products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose
Sodium Azide	LD50 Oral	Mouse	27 mg/kg
	LD50 Oral	Rat	27 mg/kg
	LD50 Dermal	Rabbit	20 mg/kg
Glycerol	LD50 Oral	Rat	12,600 mg/kg

Conclusion/Summary: To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated. Skin corrosion/irritation: No data available Serious eye damage/irritation: No data available Respiratory or skin sensitization: No data available Germ cell mutagenicity: No data available No data available. This mixture is not listed by NTP, IARC, ACGIH or OSHA as a carcinogen. Carcinogenicity **Reproductive toxicity:** No data available **Developmental toxicity:** No data available Specific target organ toxicity (single exposure): No data available Specific target organ toxicity (repeated exposure): No data available Aspiration hazard: No data available **Other Information:** No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Product / ingredient name	Result	Species	Exposure
Sodium Azide	Acute EC50 0.348 mg/L Fresh water	Algae – Pseudokirchneriella subcapitata	96 hours
	Acute EC50 4.2 to 6.2 mg/L Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 9000 ug/L Fresh water	Crustaceans - Gammarus lacustris	48 hours
	Acute LC50 0.68 mg/L Fresh water	Fish - Lepomis macrochirus	96 hours

No data available
No data available
No data available
No data available
Although present at low concentrations, disposal should consider that sodium azide is present. Releases to the environment should be avoided. Very toxic to aquatic life

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any byproducts should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with

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jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

	DOT	ΙΑΤΑ	
	Classification		
UN number	Not regulated	Not regulated	
UN proper	Not regulated	Not regulated	
Transport hazard class(es)	Not regulated	Not regulated	
Packing group	Not regulated	Not regulated	

pollutant

Environmental Hazards: Based on the data available, the mixture is not regulated as an environmental hazard or a marine

Special precautions for user: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

SECTION 15: REGULATORY INFORMATION

US Federal and State Regulations

SARA section 313	Not listed
SARA section 311/312 Classification	Acute Health Hazard
TSCA status	Not listed
WHMIS classification	Not listed
California Proposition 65	Not listed
Chemical Safety Assessment	Not listed

SARA 302/304

Composition/information on ingredients

			SARA 302 ⁻	TPQ	SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Sodium Azide	< 0.1	Yes	500	-	1000	-

SARA 304 RQ 1000000 lbs / 454000 kg

State regulations	
New Jersey	
Sodium Azide	26628-22-8
Sodium Phosphate	7558-79-4
Massachusetts	
Sodium Azide	26628-22-8
Sodium Phosphate	7558-79-4
Pennsylvania	
Sodium Azide	26628-22-8
Sodium Phosphate	7558-79-4
Glycerol	56-81-5
Minnesota	
Sodium Azide	26628-22-8
Rhode Island	
Sodium Azide	26628-22-8
Glycerol	56-81-5

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All components are listed or exempted.

International regulations

Canada inventory

International lists Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: All components are listed or exempted. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): All components are listed or exempted. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): All components are listed or exempted.

SECTION 16: OTHER INFORMATION

Indication of changes
Other information

: 30-Aug-21

:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

H300	Fatal if swallowed
H310	Fatal in contact with skin
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

NFPA health hazard	: 1 - May be irritating	
NFPA fire hazard	: 0 - Not combustible	
NFPA reactivity	: 0 - Not reactive when mixed with water	
HMIS III Rating		
Health Flammability	 1 - Slight Hazard - Irritation or minor reversible injury possible 0 - Minimal Hazard 	
Physical	: 0 - Minimal Hazard	

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