

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

GHS Product Identifier Human IgG₁ Lambda-AP

Other means of identification N/A
Product type Liquid
Product code 0151L-04
Chemical formula Not applicable
CAS No Not applicable
SDS No. 2232208

Relevant Identified uses of the substance or mixture and uses

advised against Not applicable

Supplier's details Southern Biotechnology Associates, Inc.

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Tel: (205) 945-1774 Fax: (205) 945-8768

Website: www.southernbiotech.com

Distributor and Emergency Phone Refer to website for distributor and emergency phone numbers.

No. 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)

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/MixtureMixtureOther Means of IdentificationNot available

CAS Number/other identifiers

CAS Number Not applicable

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
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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 ingestionWash 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 See Sections 2 and 11

effects, both acute and delayed

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

Use an extinguishing agent suitable for the surrounding fire.

None known

Unsuitable extinguishing media None known

Special hazards arising from the substance or mixture In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products No specific data

Special protective actions for firefightersPromptly 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.

Special protective equipment for firefighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full

face-piece operated in positive pressure mode

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/m³ NaN₃	
		Ceiling: 0.1 ppm HN₃	
USA OSHA	OSHA PEL (TWA)	Absorbed through skin	
		(Vacated) Ceiling: 0.3 mg/m³ NaN₃	
		(Vacated) Ceiling: 0.1 ppm HN ₃	
ACGIH TLV ACGIH TLV		Ceiling: 0.29 mg/ m³ NaN₃	
		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/m³) Total D		Total Dust	
		15 mg/m ³	

Exposure controls

Body protection

Appropriate engineering controls General ventilation systems should be sufficient to control worker exposure to

airborne contaminants; showers and eyewash 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 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.

Eye protection Tightly fitting safety goggles complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to

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liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of

protection: safety glasses with side-shields.

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a

full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the

respirator is the sole means of protection, use a full-face supplied air respirator.

Use respirators and components tested and approved under appropriate

government standards such as NIOSH (US) or CEN (EU).

Conditions to avoid No specific data Incompatible materials No specific data

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

Other information When using, do not eat, drink, or smoke. May contain material of animal origin.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: LiquidColor: ColorlessOdor: Not availableOdor threshold: Not available

pH : ≈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 (flammable) limits Not available

Vapor pressure: Not availableVapor density: Not availableRelative density: Not available

Solubility : Soluble in the following materials:

cold water and hot water.

Partition coefficient n-octanol/water: Not availableAuto-ignition temperature: Not availableDecomposition temperature: Not availableSADT: Not availableViscosity: 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:

Serious eye damage/irritation:

Respiratory or skin sensitization:

Germ cell mutagenicity:

No data available
No data available
No data available

Carcinogenicity No data available. This mixture is not listed by NTP, IARC, ACGIH or OSHA as a carcinogen.

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

ECOLONICITY			
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

Persistence and degradabilityNo data availableBioaccumulative potentialNo data availableMobility in soilNo data availableSoil/water partition coefficient (KOC)No data availableOther adverse effectsNo data available

Note 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 by-products 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	IATA
	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

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

oollutant

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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Canada inventory

All components are listed or exempted.

International regulations

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 : 27-Aug-21

Other information : 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 : 1 - Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 - Minimal Hazard Physical : 0 - Minimal Hazard



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