

## SECTION 1: Identification of the substance or mixture and of the supplier

<b>GHS Product Identifier</b>	Goat F(ab') <sub>2</sub> Anti-Human Ig-BIOT
<b>Other means of identification</b>	N/A
<b>Product type</b>	Liquid
<b>Product code</b>	2012-08
<b>Chemical formula</b>	Not applicable
<b>CAS No</b>	Not applicable
<b>SDS No.</b>	2231787
<b>Relevant Identified uses of the substance or mixture and uses advised against</b>	Not applicable
<b>Supplier's details</b>	Southern Biotechnology Associates, Inc. 160 Oxmoor Boulevard Birmingham, Alabama 35209 USA Tel: (205) 945-1774 Fax: (205) 945-8768 Website: www.southernbiotech.com
<b>Distributor and Emergency Phone No.</b>	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

Acute Toxicity Oral - Category 5

### Label elements

#### GHS-US labeling

##### Hazard pictograms (GHS-US)

None

<b>Signal word (GHS-US)</b>	Warning
<b>Hazard statements (GHS-US)</b>	H303 – May be harmful if swallowed
<b>Precautionary statements (GHS-US)</b>	P262 – Do not get in eyes, on skin, or on clothing.
<b>Prevention</b>	P264 – Wash hands, forearms, and exposed areas thoroughly after handling. P270 – Do not eat, drink, or smoke when using this product.
<b>Response</b>	P312 – Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Storage</b>	Not applicable
<b>Disposal</b>	P501 – Dispose of contents and container in accordance with all local, regional, national, and international regulations.
<b>Other hazards</b>	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.

**Unknown acute toxicity (GHS US)** No data available

Full text of H-phrases: see section 16



Inhalation	No specific data
Skin contact	No specific data
Ingestion	No specific data

**Indication of any immediate medical attention and special treatment needed, if necessary**

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**SECTION 5: Firefighting measures**

**Extinguishing media**

**Suitable extinguishing media** Use an extinguishing agent suitable for the surrounding fire.

**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 fire-fighters** 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.

**Special protective equipment for fire-fighters** 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. 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) and food and drink. Keep container tightly closed and sealed until ready for use. 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. Recommended storage temperature: 2 - 8°C

**SECTION 8: Exposure controls/personal protection**

**Control parameters**

<b>Sodium Azide (26628-22-8)</b>		
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	Absorbed through skin. Notes NaN <sub>3</sub> CEIL: 0.3 mg/m <sup>3</sup> , (NaN <sub>3</sub> )
<b>USA NIOSH</b>	NIOSH REL (TWA) (ppm)	Absorbed through skin. Notes As HN <sub>3</sub> CEIL: 0.1 ppm, (as HN <sub>3</sub> )
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	Absorbed through skin. Notes as NaN <sub>3</sub> CEIL: 0.3 mg/m <sup>3</sup> , (as NaN <sub>3</sub> )
<b>USA OSHA</b>	OSHA PEL (TWA) (ppm)	Absorbed through skin. Notes as HN <sub>3</sub> CEIL: 0.1 ppm, (as HN <sub>3</sub> )

**Exposure controls**

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls

Do not let product enter drains. 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,

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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.	
Body protection	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	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to 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

<b>Appearance</b>	
<b>Physical state</b>	: Liquid
<b>Color</b>	: Colorless
<b>Odor</b>	: Not available
<b>Odor threshold</b>	: Not available
<b>pH</b>	: ≈7.4
<b>Melting point</b>	: Not available
<b>Boiling point</b>	: Not available
<b>Flash Point</b>	: Not available
<b>Burning time</b>	: Not applicable
<b>Burning rate</b>	: Not applicable
<b>Evaporation rate</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not available
<b>Lower and upper explosive (flammable) limits</b>	: Not available
<b>Vapor pressure</b>	: Not available
<b>Vapor density</b>	: Not available
<b>Relative density</b>	: Not available
<b>Solubility</b>	: Soluble in the following materials: cold water and hot water.
<b>Partition coefficient n-octanol/water</b>	: Not available
<b>Auto-ignition temperature</b>	: Not available
<b>Decomposition temperature</b>	: 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.

**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, water. (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.)

**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	Result	Species	Dose	Exposure
Sodium Azide	LD50 Oral	Mice	27 mg/kg	-
	LD50 Oral	Rat	45 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

**Carcinogenicity:**

Product/ingredient name	Result	Species	Dose	Exposure
Sodium Azide	Equivocal - Oral - TD	Rat	5460 mg/kg	78 weeks Continuous
	Equivocal - Oral - TDLo	Rat	2730 mg/kg	78 weeks Continuous

**Reproductive toxicity:** No data available  
**Teratogenicity:** 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

**Information on the likely routes of exposure:** Routes of entry anticipated: Oral, Dermal, and Inhalation.

**Potential acute health effects**

**Eye contact:** No known significant effects or critical hazards  
**Inhalation:** No known significant effects or critical hazards.  
**Skin contact:** No known significant effects or critical hazards.  
**Ingestion:** Harmful if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact:** No specific data  
**Inhalation:** No specific data

**Skin contact:** No specific data

**Ingestion:** No specific data

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

**Potential immediate effects:** Not available

**Potential delayed effects:** Not available

**Long term exposure**

**Potential immediate effects:** Not available

**Potential delayed effects:** Not available

**Potential chronic health effects:** Not available

**General:** No known significant effects or critical hazards.

**Carcinogenicity:** No known significant effects or critical hazards.

**Mutagenicity:** No known significant effects or critical hazards.

**Teratogenicity:** No known significant effects or critical hazards.

**Developmental effects:** No known significant effects or critical hazards.

**Fertility effects:** No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Not available.

**Additional Information**

RTECS: VY8050000

**SECTION 12: Ecological information**

**Toxicity**

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
	Chronic NOEC 5600 ug/L Marine water	Algae - Macrocyctis pyrifera	96 hours

**Persistence and degradability** No data available

**Bioaccumulative potential** No data available

**Mobility in soil**

Soil/water partition coefficient (KOC) No data available

**Other adverse effects** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

**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 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 Classification	IATA
UN number	Not regulated	Not regulated
UN proper	-	-
Transport hazard class(es)	-	-
Packing group	-	-
Environmental hazards	No	No
Additional information	-	-

Special precautions for user: Transport within user s premises 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**

- |  |   |
|--|---|
| <p>U.S. Federal regulations</p> <p>Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)</p> <p>Clean Air Act Section 602 Class I Substances</p> <p>Clean Air Act Section 602 Class II Substances</p> <p>DEA List I Chemicals (Precursor Chemicals)</p> <p>DEA List II Chemicals (Essential Chemicals)</p> | <p>TSCA: All components are listed or exempted.</p> <p>Clean Water Act (CWA) 311: disodium hydrogenorthophosphate</p> <p>Not listed</p> <p>Not listed</p> <p>Not listed</p> <p>Not listed</p> <p>Not listed</p> |
|--|---|

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Sodium Azide	0 - 0.1	Yes	500	-	1000	-

SARA 304 RQ 1000000 lbs / 454000 kg

SARA 311/312

Classification Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Sodium Azide	0 - 0.1	No	No	Yes	Yes	No

State regulations

New Jersey  
Sodium Azide 26628-22-8



Sodium Phosphate	7558-79-4	
New York		
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	
California		
Sodium Azide	26628-22-8	
Sodium Phosphate	7558-79-4	
Louisiana		
Sodium Azide	26628-22-8	
Minnesota		
Sodium Azide	26628-22-8	
Rhode Island		
Sodium Azide	26628-22-8	
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.

Chemical Weapons Convention List Schedule I	Not listed
Chemical Weapons Convention List Schedule II Chemicals	Not listed
Chemical Weapons Convention List Schedule III Chemicals	Not listed

## SECTION 16: Other information

- Indication of changes** : 30-Apr-15
- 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:**

H303	May be harmful if swallowed
P262	Do not get in eyes, on skin, or on clothing
P264	Wash hands, forearms, and exposed areas thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P501	Dispose of contents and container in accordance with all local, regional, national, and international regulations.

**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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