SouthernBiotech



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

| | of the substance of mixture and of the supplier |
|--|--|
| GHS Product Identifier | Goat Anti-Rhesus IgG(H+L)-HRP |
| Other means of identification | N/A |
| Product type | Liquid |
| Product code | 6200-05 |
| Chemical formula | Not applicable |
| CAS No | Not applicable |
| SDS No. | 2230677 |
| 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 |
| Distributor and Emergency Phone No. | Website: www.southernbiotech.com Refer to website for distributor and emergency phone numbers. Tel: (205) 945-1774 |

SECTION 2: Hazards identification

Classification of the substance or mixture

| Classification of the substance of mixtu | re |
|--|-------------------|
| GHS-US classification | |
| Not a hazardous substance or mixture | |
| Label elements | |
| GHS-US labeling | |
| Hazard pictograms (GHS-US) | |
| Not a hazardous substance or mixture | |
| Other hazards | none |
| Unknown acute toxicity (GHS US) | No data available |
| Full text of H-phrases: see section 16 | |
| | |

SECTION 3: Composition/information on ingredients

| Substance/Mixture | Mixture |
|-------------------------------|----------------|
| Other Means of Identification | Not available |
| CAS Number/other identifiers | |
| CAS Number | Not applicable |

| Ingredient Name | Product Identifier | Percentage |
|-----------------|---|------------|
| Glycerol | (CAS No.) 56-81-5 / [EINECS(EC#)] 200-289-5 | 50% |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

Occupational exposure limits, if available, are listed in Section 8

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, see medical advice. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such a 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. Consult a physician. | |
| 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. Consult a physician. | |
| First-aid measures after skin contact | Flush contaminated skin with plenty of water and soap. 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. Get medical attention. If necessary, call a poison center. | |

Most important symptoms and effects, acute and delayed

Potential acute health effects

| Eye contact Inhalation Skin contact Ingestion | No known significant effects or critical hazards No known significant effects or critical hazards No known significant effects or critical hazards May be harmful if swallowed. | | | |
|--|--|--|--|--|
| Over-exposure signs/symptoms | indy be harman swallowed. | | | |
| Eye contact | No specific data | | | |
| 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

Unsuitable extinguishing media

Special hazards arising from the substance or mixture

Hazardous thermal decomposition products

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. None known Carbon oxides, nitrogen oxides (NOx) No specific data

Rev. 30-Apr-15

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA Mailing Address: P.O. Box 26221 • Birmingham, AL 35260 • USA Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • Fax: 205.945.8768 Email: info@southernbiotech.com • Website: www.southernbiotech.com

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|--|--|--|--|--|
| 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. 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

| Component | CAS-No. | Value | Control parameters | Basis | |
|-----------|---------|------------------------------------|--|--|--|
| Glycerol | 56-81-5 | TWA | 10 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 | |
| | | TWA | 5 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 | |
| | | TWA | 10 mg/m3 | USA. ACGIH Threshold Limit Values (TLV) | |
| | Remarks | Upper Respiratory Tract irritation | | | |
| | | See Appe | See Appendix D - Substances with No Established RELs | | |
| | | TWA | 5 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants | |
| | | TWA | 15 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants | |

Exposure controls

Appropriate engineering controls

Environmental exposure controls

Personal protective equipment

Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday. Do no let product enter drains.

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. Body protection Impervious clothing. 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. Safety eyewear complying with an approved standard should be used when a Eye protection 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 fullface respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the Rev. 30-Apr-15

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| | | | |
| | | | |
| | sole means of protection, use a full- | | • |
| | 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 products should not be produced. | and use, hazardous decom | position |
| Other information | When using, do not eat, drink, or sm | oke. May contain materia | l of animal origin. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| Appearance | | |
|---|---|---|
| Physical state | : | Liquid |
| Color | : | Light amber to dark amber |
| Odor | : | Not available |
| Odor threshold | : | Not available |
| рН | : | Not available |
| 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 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. |
| Possibility Of Hazardous Reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions To Avoid | No specific data. |
| Incompatible Materials | Strong oxidizers |
| Hazardous Decomposition Products | No specific data. |

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No data available

| Conclusion/Sun | nmarv: | 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: Germ cell mutagenicity: | | No data available No data available | | |
| Germiten mutago | enicity. | | | |
| Carcinogenicity : | | | | |
| 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. | | | |
| ACGIH: | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. | | | |
| NTP: | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. | | | |
| OSHA: | | | | |
| Reproductive tox | icity: | No data available | | |
| Teratogenicity: | | No data available | | |
| | | exposure): No data available ed exposure): No data available | | |
| | 1: No data available | | | |
| - | | of exposure: Routes of entry anticipated: Oral, Dermal, and Inhalation. | | |
| Potential acute | - | or exposure. Routes of entry anticipated. Oral, Dermal, and initialation. | | |
| Eye contact: | | nt effects or critical hazards | | |
| Inhalation: | - | | | |
| Skin contact: | | | | |
| Ingestion: Harmful if swallowed. | | | | |
| Symptomsrelated to the physical, chemical and toxicological characteristics | | | | |
| Eye contact: | | | | |
| Inhalation: | | | | |
| Skin contact: | | | | |
| Ingestion: | No specific data | | | |
| Delayed and immediate effects and also chronic effects from short and long term exposure | | | | |
| | | | | |
| Short term expo | | | | |
| Potential imme | | Not available | | |
| Potential delaye | | Not available | | |
| Long term expos | | | | |
| Potential imme | | Not available | | |
| Potential delaye | | Not available | | |
| | ichealtheffects: | | | |
| General: | | own significant effects or critical hazards. | | |
| Carcinogenicity | | own significant effects or critical hazards. | | |
| Mutagenicity: | | own significant effects or critical hazards. | | |
| | Teratogenicity: No known significant effects or critical hazards. | | | |
| Developmental | enects: No Kho | own significant effects or critical hazards. Rev. 30- | | |
| | | | | |

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Fertility effects: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicityestimates

Not available.

| SECTION 12: Ecological information | | |
|---|-------------------|--|
| Toxicity | No data available | |
| Persistence and degradability | No data available | |
| Bioaccumulative potential | No data available | |
| Mobility in soil | No data available | |
| Other adverse effects | No data available | |

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 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 | - | - |
| 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

| U.S. Federal regulations | TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): All components are listed or exempted. Clean Water Act (CWA) 311: disodium hydrogenorthophosphate |
|---|--|
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | Not listed |
| Clean Air Act Section 602 Class I Substances | Not listed |
| Clean Air Act Section 602 Class II Substances | Not listed |
| DEA List I Chemicals (Precursor Chemicals) | Not listed |

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|------------------------------------|---|----------------------------|----------------------|---------------------------|------------------|
| | | | | | |
| | | | | | |
| DEA List II Chemicals | (Essential Ch | emicals) | Not listed | | |
| SARA 302/304 | | | | | |
| <u>Composition/inform</u> | nationoningre | edients | | | |
| | SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. | | | | |
| | | | | | |
| SARA 313 Components | S | | | | |
| | | | | CAS numbers that exceed t | he threshold (De |
| | els established | by SARA Title III, Section | 313 | | |
| <u>SARA 311/312</u> | | | | | |
| Classification | Chronic health | h hazard | | | |
| Classification | chi onic nealti | 1 1102010 | | | |
| State regulations | | | | | |
| New Jersey | | | | | |
| Sodium Phos | ohate | 7558-79-4 | | | |
| Glycerol | | 56-81-5 | | | |
| New York | | | | | |
| Sodium Phos | ohate | 7558-79-4 | | | |
| Massachusetts | | | | | |
| Sodium Phos | ohate | 7558-79-4 | | | |
| Pennsylvania | | 7558-79-4 | | | |
| Sodium Phos Glycerol | Shale | 7558-79-4 56-81-5 | | | |
| California | | 20-01-2 | | | |
| Sodium Phosphate | | 7558-79-4 | | | |
| Minnesota | | | | | |
| Glycerol | | 56-81-5 | | | |
| Rhode Island | | | | | |
| Glycerol | | 56-81-5 | | | |
| Canada inventory | All cor | mponents are listed or ex | empted. | | |
| | | | | | |
| International regulat | <u>tions</u> | | | | |
| International lists | - | | | r exempted. | |
| China inventory (IECSC): All compo | | ory (IECSC): All compone | nts are listed or ex | empted. | |
| Japan inventory: All component | | ory: All components are | listed or exempted | J. | |
| | Korea invent | ory: All components are | listed or exempted | d. | |
| | Malaysia Invo | entory (EHS Register): A | Il components are | listed or exempted. | |
| | New Zealand | Inventory of Chemical | s (NZIoC): All comp | onents are listed or exem | pted. |

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** Other information
- : 30-Apr-15 This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Goat Anti-Rhesus IgG(H+L)-HRP

GHS Full Text Phrases:

Flammability Physical

| NFPA health | : | 0 - No unusual hazard |
|------------------|---|---|
| NFPA fire hazard | : | 0 - Not combustible |
| NFPA reactivity | : | 0 - Not reactive when mixed with water |
| HMIS III Rating | | |
| Health | : | 0- Minimal Hazard |

: 0 - Minimal Hazard

: 0 - Minimal Hazard



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