

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

GHS product identifier: BlueGene Biotech ELISA kit

Recommended use: components of these kits including reagents, calibrators are all well packaged for final use, test kits are prepackaged complete ready for use Reagents ready to use in research purpose, not for use in diagnostic or therapeutic procedures.

| | |
|----------------------------|---|
| Supplier Address | BlueGene Biotech Lane 166 Tianxiong Road(Rm.404,Bldg 2), Pudong New District,Shanghai,China 201308 Tel: +86-21-61106435/61106436 |
| E-mail address | tech@bluegene.cc |
| Emergency telephone | +86-21-61106435 |

2. HAZARDS IDENTIFICATION

GHS - Classification

Ozone : Not applicable

GHS Label elements, including precautionary statements

Other information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

| | | | | | |
|--|------------|------------|-----------------|--------|--|
| HAZARDOUS INGREDIENTS: ANTIBODY COATED MICROTITER PLATE | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| Affinity Purified Rabbit Antibody | Not Listed | Not Listed | Not Established | <100ug | Not classified None |
| HAZARDOUS INGREDIENTS: STANDARDS: 6vials, 0.5ml/vial | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| Recombinant protein from E.coil | Not Listed | Not Listed | Not Established | <0.1% | Not classified None |
| Distilled Water | 7732-18-5 | 231-791-2 | Not Listed | >90% | Not classified None |
| ProCline 300 Preservative | 55965-84-9 | Not Listed | 613-167-0005 | <0.1% | Irritant Hazard Phrases: H302, H314, H317, H332; H410 Precaution Phrases: P273, P280, P305 + P351 + P338, P310, P501 |
| HAZARDOUS INGREDIENTS:ENZY ME CONJUGATE 6ml | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| HRP conjugate antigen | Not Listed | Not Listed | Not Established | <100ug | Not classified None |
| ProCline 300 Preservative | 55965-84-9 | Not Listed | 613-167-0005 | <0.1% | Irritant Hazard Phrases: H302, H314, H317, H332; H410 Precaution Phrases: P273, P280, P305 + P351 + P338, P310, P501 |
| Tris Hydrochloride | 1185-53-1 | 214-684-5 | Not Listed | <1.0% | Not classified None |
| HAZARDOUS INGREDIENTS: WASHER BUFFER 10ml | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| Distilled Water | 7732-18-5 | 231-791-2 | Not Listed | >85% | Not classified None |
| Tris Hydrochloride | 1185-53-1 | 214-684-5 | Not Listed | <8.0% | Not classified None |
| Sodium Chloride | 7647-14-5 | 231-598-3 | Not Listed | <9.0% | Not classified None |
| Triton X-100 | 9002-93-1 | Not Listed | Not Listed | <1.0% | Irritant, Harmful Hazard Phrases: H318, H302 |
| HAZARDOUS INGREDIENTS: TMB SUBSTRATE SOLUTION | CAS# | EINECS# | ICSC# 2 | Amount | Hazard Classification; Hazard Phrases |

| | | | | | |
|--|------------|------------|------------|--------|---|
| Distilled Water | 7732-18-5 | 231-791-2 | Not Listed | >95% | Not classified None |
| TMB | 54827-17-7 | 259-364-6 | Not Listed | <0,01% | Concentration is too low. |
| HAZARDOUS INGREDIENTS: STOP SOLUTION 6ml | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| Distilled water | 7732-18-5 | 231-791-2 | Not Listed | >95% | Not classified None |
| Sulfuric Acid | 7664-93-9 | Not Listed | Not Listed | 1M | Hazard Classification: Highly corrosive Hazard Phrases: H314, Precaution Phases: P280-P305, P351, P338 |
| HAZARDOUS INGREDIENTS: BALANCE SOLUTION 6ml | CAS# | EINECS# | ICSC# | Amount | Hazard Classification; Hazard Phrases |
| Distilled water | 7732-18-5 | 231-791-2 | Not Listed | >95% | Not classified None |
| NP-40 Lysis Buffer | 9016-45-9 | Not Listed | Not Listed | 1% | HS-No: 34021300900 Hazard Symbols: H302-H318-H400 Precaution Phases: P273-P280-P305 + P351 + P338 |

4. FIRST AID MEASURES

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation

Move to fresh air.

Ingestion

Clean mouth with water. Drink plenty of water.

Notes to physician

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable properties

Not flammable.

Flash point

not determined

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Explosion Data

Sensitivity to Mechanical None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (Approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Environmental precautions Try to prevent the material from entering drains or water courses.

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------------|---|---|--|
| Sulphuric acid 7664-93-9 | TWA: 0.2 mg/m ³ thoracic fraction | TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ | IDLH: 15 mg/m ³ TWA: 1 mg/m ³ |

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Engineering measures Showers
Eyewash stations
Ventilation systems

Personal protective equipment

| | |
|---------------------------------|---|
| Eye/face protection | No special protective equipment required |
| Skin and body protection | No special protective equipment required |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| Hygiene measures | Handle in accordance with good industrial hygiene and safety practice |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------------------|---------------------------|------------------------------------|---------------------------|
| Appearance | No information available. | Odor | No information available. |
| Odor Threshold | No information available | Physical State @20°C | No information available |
| pH | No information available | Autoignition temperature | No information available |
| Flash point | No information available | Boiling point/boiling range | No information available |
| Decomposition temperature | No information available | Flammability Limits in Air | No information available |
| Melting point/range | No information available | solubility | No information available. |
| Explosion limits | No information available | Vapor density | no data available |
| Specific Gravity | no data available | | |
| Evaporation rate | No information available | | |
| VOC Content(%) | not applicable | | |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under recommended storage conditions. |
| Incompatible products | None known based on information supplied. |
| Conditions to avoid | None known based on information supplied. |
| Hazardous decomposition products | None known based on information supplied. |
| Hazardous polymerization | Hazardous polymerization does not occur. |

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Chronic toxicity

Carcinogenicity This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I)

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|----------------|-------|---------|-------|------|
| Sulphuric acid | A2 | Group 1 | Known | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects Eyes. Respiratory system. Skin. Teeth.

12. ECOLOGICAL INFORMATION

The environmental impact of this product has not been fully investigated

13. DISPOSAL CONSIDERATION

Waste Disposal:

This material, as supplied, is not a hazardous waste according to Federal regulations (40CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

This product contains **Sulphuric acid** that are listed with the State of California as a hazardous waste.

14. TRANSPORT INFORMATION

| | |
|------|---------------------|
| IATA | Not dangerous goods |
| CNAS | Not dangerous goods |

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Percent % | SARA 313 - Threshold Values % |
|---|-----------|-----------|-------------------------------|
| Sulphuric acid | 7664-93-9 | 1M | 1.0 |
| <u>SARA 311/312 Hazard Categoric</u> | | | |
| Acute Health Hazard | no | | |
| Chronic Health Hazard | no | | |
| Fire Hazard | no | | |
| Sudden Release of Pressure Hazard | no | | |
| Reactive Hazard | no | | |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

International Regulations

| Chemical Name | Carcinogen Status | Exposure limits |
|----------------|-------------------|-----------------|
| Sulphuric acid | A2 | |

Note:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

The End

Date of revision: January 5th, 2019