Material Safety Data Sheet

SECTION 1. Identification

| 1.1 Product identifier | STJ193116 |
|---------------------------------|--|
| 1.2. Relevant identified uses | This product is composed of antibody in aqueous buffer solution, intended for the purposes of scientific research use only. It is not intended for diagnostic or other medical uses. |
| of the substance or mixture | This product contains no hazardous components, or the concentration of all chemical |
| and uses advised against | constituents is below the regulatory threshold limits described by European Directive |
| C C | 91/155/EEC, 93/112/EC and (EC) 1272/2008 (CLP). |
| | St John's Laboratory Ltd |
| | Knowledge Dock Business Centre |
| 1.3. Details of the supplier of | University Way |
| the safety data sheet | London |
| - | E16 2RD, UK |
| | Tel: 0208 223 3081 |
| | UK - Call 111 if you urgently need medical assistance or advice if in a non-life-threatening |
| 1.4. Emergency telephone | situation. 111 is available 24 hours a day, 365 days a year. |
| number | USA – Emergency services – Dial 911 |
| number | EU – Emergency services – Dial 112 |
| | ROW – Please seek assistance from local country services. |

SECTION 2. Hazards Identification

2.1 Classification of substance or mixture Product definition:

Mixture

Classification according to Reg (EC) No. 1272/2008

Not a hazardous substance or mixture according to directives 67/548/EEC or 1999/45/EC. OSHA Hazard Communication Standard 29CFR1910:1200 classifies this product as non-hazardous.

2.2. Label elements

The product is not required to be labelled according to EC directives. Precautionary statements (EU) 28 1272/2008, wear appropriate PPE, gloves and protective clothing.

2.3. Other hazards

Physical/chemical: NA Human health: NA

SECTION 3. Composition/information on ingredients

3.1 Substances

NA

3.2 Mixtures

| Name | EC# | CAS# | Amount |
|--------------|-----------|------------|--------|
| Glycerol | 200-289-5 | 56-81-5 | 50% |
| Sodium Azide | 247-852-1 | 26628-22-8 | <0.1% |

According to European Directive 91/155/EEC and regulations (EC) 1272/2008 (CLP) Sodium Azide is non-hazardous when concentration < 0.1%.

SECTION 4. First Aid Measures

4.1. Description of first aid measures

| Eye Exposure | In case of contact with eyes, immediately flush eyes with water for at least 15 minutes. Seek medical attention. |
|--------------|--|
| Ingestion | If swallowed and person is conscious, rinse mouth |
| | with water. Seek medical attention. |
| Inhalation | If inhaled, move to fresh air. If breathing difficulties |
| | occur, seek medical attention. |
| Skin | In case of contact, wash skin with soap and water. |
| Exposure | |

4.2. Most important symptoms and effects, both acute and delayed Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed

Not applicable.

SECTION 5. Fire Fighting Measures

| 5.1. Extinguishing media | Water spray, dry chemical, foam or carbon dioxide. |
|--------------------------|--|
| 5.2. Special hazards | No data available. |
| arising from the | |
| substance or mixture | |
| 5.3. Advice for | Wear protective clothing and self-contained |
| firefighters | breathing apparatus to prevent contact with |
| | skin and eyes. |
| 5.4 Further | No data available. |
| information | |

SECTION 6. Accidental Release Measures

| 6.1. Personal | Maintain adequate ventilation, eye wash |
|-------------------------|--|
| precautions, protective | and quick drench facilities in work area. |
| equipment and | Wear a lab coat, chemical resistant gloves |
| emergency procedures | and chemical safety. |

| 6.2. Environmental precautions | Avoid dispersal of spilt material and runoff contact with soil. Prevent product from entering drains. |
|--|---|
| 6.3. Methods and material for containment and cleaning up | Absorb liquid with an absorbent material. Transfer contaminated absorbent to a chemical waste container for disposal. |
| 6.4. Reference to other sections | See Section 13. |

SECTION 7. Handling and Storage

| 7.1. Precautions for safe handling | Avoid inhalation and contact with eyes and skin. Avoid prolonged or repeated exposure. |
|---|---|
| 7.2. Conditions for safe storage, including any incompatibilities | Store according to instructions on the product label and data sheet. |
| 7.3. Specific end use(s) | No other specific uses are intended. These products are for research purposes only and must not be used in diagnostic or other medical purposes. |

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

| Name | Occupational exposure limits (EH40/2005 WEL, UK) |
|--------------|---|
| Glycerol | TWA (8 h): 10 mg/m ^{3,} Form: Mist |
| Sodium Azide | TWA (8 h): 0.1 mg/m ³ |
| | STEL (15 min): 0.3 mg/m ³ |

8.2. Exposure controls

| Engineering | Practice good safety and industrial hygiene, |
|-------------------|---|
| Controls | ensuring PPE is worn prior to handling. Wash |
| | hands after handling. |
| Eye/face | Avoid contact with the eyes, and wear safety |
| protection | glasses or goggles with side shields conforming |
| | to EN 166 (EU). |
| Skin protection - | Avoid contact with skin and mucous |
| hands | membranes. Avoid prolonged or repeated |
| | contact with skin, and wear gloves which |
| | conform to EN374 (EU). Gloves should be of |
| | non-reactive material such as latex, butyl |
| | rubber, polyvinyl chloride, etc. The use of |
| | gloves should take into account other |
| | chemicals which are being handled, as well as |
| | physical properties, such as puncture |
| | protection, dexterity and thermal protection. |
| Skin protection - | Lab coat should be worn to protect other |
| other | bodily areas, as well as footwear which fully |
| | covers the feet. |
| Respiratory | Under normal conditions of use a respirator is |
| protection | not required. Should a respirator be required |
| | the user should be properly trained to ensure |
| | proper fitting. |
| Thermal | NA |
| hazards | |

St John's Laboratory

Environmental exposure controls Comply with local environmental regulations. Where necessary this may include the use of cases, fume scrubbers, filters or engineering modifications to equipment to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical State | Liquid at room temperature. |
|---------------------------------|-----------------------------|
| Colour | Colourless to yellow |
| Odour | Odourless. |
| Melting/Freezing Point | Data not available. |
| Initial boiling point & boiling | Data not available. |
| range | |
| Flammability | Data not available. |
| Lower and upper explosion | Data not available. |
| limit | |
| Flash point | Data not available. |
| Auto-ignition temperature | Data not available. |
| Decomposition temperature | Data not available. |
| рН | 7.4 – 7.8 |
| Kinematic viscosity | Data not available. |
| Solubility | Data not available. |
| Partition coefficient (n- | Data not available. |
| octanol/water) | |
| Vapour pressure | Data not available. |
| Relative density | Data not available. |
| Relative vapour density | Data not available. |
| Particle characteristics | Data not available. |

9.2. Other information

Not available

SECTION 10. Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Product is stable under normal operating conditions, and when used according to the data sheet.

10.3. Possibility of hazardous reactions

No known reactions when used as described.

10.4. Conditions to avoid

Extreme temperatures and direct sunlight.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

None under normal use conditions.

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

This product is for experimental/research uses only. It has not been completely analysed, and all of the hazards may not be known.

| Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------|------------------------|----------------------|---------------------------|
| Glycerol | = 12600 mg/kg (Rat) | > 10g/kg (Rabbit) | > 570 mg/m³ (Rat) 1 h |
| Sodium Azide | 27 mg/kg (Rat) | 20 mg/kg (Rabbit) | 0.054-0.52 mg/L (dust) |

| Skin corrosion/irritation | May cause skin irritation. |
|--------------------------------------|--|
| Serious eye damage/eye irritation | May cause eye irritation. |
| Respiratory or skin sensitisation | No data available. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probably, possible or a confirmed human carcinogen by IARC. |

| Reproductive toxicity | No data available. | |
|--------------------------|--------------------------------|--|
| STOT – single exposure | No data available. | |
| STOT – repeated exposure | No data available. | |
| Aspiration hazard | No data available. | |
| Additional information | RTECS: Not available. | |
| | This product is not subject to | |
| | OSHA classification. | |

11.2. Information on other hazards No data available.

SECTION 12. Ecological information

12.1. Toxicity

| Name | Toxicity to algae | Toxicity to fish | Toxicity to daphnia and other aquatic invertebrates |
|-----------------|------------------------|--|---|
| Glycerol | - | LC50 51 – 57 mL/L (Oncorhynchus mykiss) 96 h | EC50 500 mg/L (Daphnia magna) 24 h |
| Sodium Azide | EC50 0.35 mg/L 96 h | LC50 0.7-5.5 mg/L (Oncorhynchus mykiss) 96 h | LC50 0.4-6.4 mg/L, 4.2 mg/L (Dpahnia pulex) 48 h |

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment No data available.

12.6. Endocrine disrupting properties No data available.

12.7. Other adverse effects No data available.

NU Uata available.



SECTION 13. Disposal considerations

13.1. Waste treatment methods

Product

Dispose of in accordance with local laws and national/federal regulations. Smaller quantities may be disposed of with solid waste.

Packaging

Contaminated packaging should be disposed of in the same way as unused product.

SECTION 14. Transport information

14.1. UN number or ID number, groups and classes

| Chemical Inventory Status | | |
|---------------------------|---|--|
| DOT | Not regulated | |
| ADR/RID | Considered non-hazardous for transport. | |
| IMDG | Considered non-hazardous for transport. | |
| ΙΑΤΑ | Considered non-hazardous for transport. | |
| IATA-DGR | Considered non-hazardous for transport. | |

14.6. Special precautions for user

Transport within user's premises: always transport within closed containers which are upright and secure. Users should be trained in the event of an accident of spillage.

14.7. Maritime transport in bulk according to IMO instruments Not applicable.

SECTION 15. Regulatory information

This safety data sheet conforms to regulation (EC) No. 1907/2006 (REACH), Annex II.

15.1. Safety, health and environmental regulations/legislation specific for the substance or

Mixture No data available.

15.2. Chemical safety assessment

No chemical safety assessment was carried out for this product.

SECTION 16. Other information

The products referenced in this sheet are sold with intention for research use only by personnel familiar with chemicals and trained professionals with good laboratory practices in science research. No other use is intended, and any other use may involve substantive hazards.

All information is believed to be correct at the time of writing, does not purport to be all inclusive and shall be used only as guide for experienced personnel. Users should carry out their own investigation to determine the suitability of the information for their purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.