

| 1. Information of the substance/mixture and of the company/undertaking | |
|--|--|
| 1.1 Commercial product name | Total Protein Biuret Method |
| Cat. No.: | TP245 |
| 1.2 Company: | RANDOX Laboratories Ltd., 55 Diamond Road, Crumlin, Co. Antrim, United Kingdom, BT29 4QY Tel: +44 (0) 28 9442 2413; Fax: +44 (0) 28 9445 2912 Email: msds@randox.com Website: www.randox.com |
| 1.3 In Emergencies: | Tel: +44 (0) 28 9442 2413 |

| 2. Hazards identification | |
|---------------------------|---|
| Biuret Concentrate | Sodium Hydroxide 500mmol/l (2%w/v) Potassium Iodide (1.24%w/v) |
| Blank Concentrate | Sodium Hydroxide 500mmol/l (2%w/v) |
| Total Protein Standard | Sodium Azide (0.1%w/v) Thimerosal (0.05%w/v) |
| Classification: | C; Caustic (Biuret Concentrate and Blank Concentrate) Xn; Harmful (Total Protein Standard) |

| 3. Composition / Information on Ingredients | |
|--|--|
| Warnings: | For <i>in vitro</i> diagnostic use only. Do not pipette by mouth. Handle laboratory reagents in accordance with Good Laboratory Practice. May cause burns to skin and eyes, may be irritating to mucous membranes and upper respiratory tract. Avoid contact with skin, avoid inhalation and ingestion. The Biuret Concentrate contains Potassium Iodide. May produce an allergic reaction. The Standard contains 0.1% Sodium Azide. Avoid ingestion or contact with skin or mucous membranes. In case of skin contact, flush affected area with copious amounts of water. In case of contact with eyes or if ingested, seek immediate medical attention. |
| <u>Risk phrases:</u> Biuret reagent and Blank Reagent | R34; Causes burns |
| Standard | R22; Harmful if swallowed |
| <u>Safety phrases:</u> Biuret Reagent and Blank Reagent | S26; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S45; In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) S36/37/39; Wear suitable protective clothing, gloves and eye/face protection |
| Standard | S28; After contact with skin, wash immediately with plenty of soap suds S36; Wear suitable protective clothing S45; In case of accident or if you feel unwell, seek medical advice immediately (Show label where possible) |

| 4. First aid measures | |
|-----------------------|---|
| Emergency First Aid: | Call an internal First Aider where available or else contact a physician immediately. Direction for First Aider or Physician: |
| Inhalation: | If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. |
| Ingestion: | If swallowed wash out mouth with water provided person is conscious, call a physician. |
| Skin Contact: | In case of skin contact immediately wash skin with soap and copious quantities of water. |
| Eye Contact: | Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician. |

| 5. Fire-fighting measures | |
|-------------------------------------|--|
| Flash point: | Not determined |
| Flammable limits: | Not determined |
| Extinguishing media: | No restriction |
| Special Fire Fighting Procedures: | Wear self contained breathing apparatus and protective clothing to prevent contact with skin and eyes. |
| Unusual Fire and Explosion Hazards: | May emit toxic fumes under fire conditions |
| Thermal decomposition: | Not determined |

| 6. Accidental release measures | |
|--------------------------------|--|
| After spillage: | Use appropriate spill absorbent kit as instructed by the manufacturer. Alternatively, mop up with an absorbent material and hold for waste disposal. Appropriate Personal Protective Equipment should be worn, e.g. laboratory coat, gloves, safety glasses and mask. Ventilate area and wash spill site after material pick up is complete. |
| Absorbent material: | No restriction |

| 7. Handling and storage | |
|-------------------------|---|
| 7.1 Handling: | Wash thoroughly after handling. Do not use if skin is cut or scratched. Avoid contact with eyes, skin and clothing. |
| 7.2 Storage | Store at temperatures and conditions as indicated on the product label |
| Do not store together: | N/A |

| 8. Exposure controls/personal protection | |
|---|---|
| MEL/OES | Not determined |
| Respiratory protection: | None |
| Eye protection: | Protective glasses |
| Hand protection: | Standard laboratory rubber or latex gloves. |
| Skin protection: | A laboratory coat or apron is recommended |

| 9. Physical and chemical properties | |
|--|--|
| Physical state: | Liquid |
| Colour: | Colourless (Blank Concentrate and Standard) Blue (Biuret Concentrate) |
| Odour: | Odourless |
| pH value: | Not determined |
| Boiling point | Not determined |
| Melting point: | Not determined |
| Oxidising properties: | Not determined |
| Ignition temperature | Not determined |
| Explosion limits: | Not determined |
| Density: | Not determined |
| Solubility in water: | Soluble |

| 10. Stability and reactivity | |
|-------------------------------------|--------------------------------------|
| Stability: | Stable |
| Conditions to avoid: | Not determined |
| Substances to avoid: | Strong oxidising agents, also acids. |
| Hazardous decomposition products: | Not determined |

| 11. Toxicological information: | |
|---------------------------------------|-----------------------------|
| LD50 oral | Not determined |
| LD50 intraperitoneal | Not determined |
| LD50 skin | Not determined |
| LC50 inhalation | Not determined |
| Toxicologic information: | Not thoroughly investigated |

| 12. Ecological information | |
|----------------------------|------------------------|
| Water hazard class: | Data not yet available |

| | |
|-----------------------------|--|
| 13. Disposal considerations | <p>Each disposal facility must determine proper disposal methods of the substance or preparation and any contaminated packaging to comply with Local and National Environmental Regulations</p> <p>Refer to Section 6.</p> |
|-----------------------------|--|

| 14. Transport Information | | | |
|---------------------------|------------------------|---------|------------------------|
| GGVE/GGVS: | Data not yet available | RID/ADR | Data not yet available |
| ICAO/IATA-DGR: | Data not yet available | UN-Nr.: | Data not yet available |
| IMDG-CODE: | Data not yet available | MFAG | Data not yet available |
| | | EMS: | Data not yet available |

| 15. Regulatory information | |
|--|--|
| Hazard symbols: | C and Xn |
| <u>Risk phrases:</u> Biuret reagent and Blank Reagent Standard <u>Safety phrases:</u> Biuret Reagent and Blank Reagent Standard | R34; Causes burns R22; Harmful if swallowed S26; In case of contact with eyes, rinse immediately with plenty of water and seek medical advice S45; In case of accident or if you feel unwell, seek medical advice immediately (show label where possible) S36/37/39; Wear suitable protective clothing, gloves and eye/face protection S28; After contact with skin, wash immediately with plenty of soap suds S36; Wear suitable protective clothing S45; In case of accident or if you feel unwell, seek medical advice immediately (Show label where possible) |
| Precautions: | See Section 3 |

| 16. Other information | |
|-----------------------|--|
| | The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our products is responsible for observing any National laws and guidelines applicable. |