Camlab Limited – Material Safety Data Sheet

1. Identification 1110779 Product Code BARIUM CHLORIDE 2H2O pure Product Name BaCl₂.2H₂O =244.27 Molecular Formula 10326-27-9 CAS Number CAMLAB LIMITED Supplier: Norman Way Industrial Estate Over Cambridge England CB4 5WE 01954 233110 Phone 01954 233101 Fax 08:00-17:00 01954 233110 Emergency Telephone 24hr 112 (Have this document to hand)

2. Composition

| Component | CAS No | EEC No | Conc w/w | Classification & Risk Phrases | Exp (See 8.1) |
|--------------------------|------------|-----------|----------|-------------------------------|---------------|
| Barium compounds (as Ba) | 10326-27-9 | 233-788-1 | 56.2% | T : R20,R25 | WEL |

3. Hazards Identification

Harmful by inhalation. Toxic if swallowed.

| 4. First Aid Meas | ures |
|-------------------|---|
| Eyes | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION. |
| Skin | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION. |
| Inhalation | Remove from exposure. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. |
| Ingestion | Wash out the patients mouth thoroughly with water. If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY. |

| 5. Fire Fighting Measures | | |
|---------------------------|--|--|
| Hazards | May evolve toxic fumes if involved in a fire. | |
| Extinguishing Media | Consider what other flammable materials are present and act accordingly. | |
| Unsuitable Media | Nothing specified. | |

6. Accidental Release Measures

PersonalAvoid breathing dust-wear respiratory protective equipment. Do not allow other people to
enter area. Do not allow general use of area until it is safe to do so.EnviromentalNotify the Environmental Agency and local Environmental Health Officer if major spillage
occurs.

| 6. Accidental Release Measures (continued) | |
|--|--|
| Major Spillage | Shovel/sweep up into container for removal Wash area down with copious amounts of water. |
| Minor Spillage | Shovel/sweep up into container for removal Wash area down with copious amounts of water. |
| 7. Storage & Han | dling |
| Handling Precautions | Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing. |
| | Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits. |
| Storage Conditions | Well ventilated, cool, dry storage . |

8.1 Workplace Exposure Limits

| Workplace Exposure Limits | Long Term (8hr TWA): | - | ppm | 0.5000 mg m-3 |
|---------------------------|----------------------------|---|-----|---------------|
| | Short Term (15min Period): | - | ppm | - mg m-3 |

| 8.2 Personal Protection | | |
|-------------------------|--|--|
| Respiratory | If process creates significant amounts of dust use L.E.V. or wear suitable dust mask. | |
| Hands | Wear gloves. | |
| Eyes | Use chemical splash proof glasses or goggles. | |
| Skin | Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn. | |

9. Physical & Chemical Properties

| Appearance | White crystalline powder or granules. |
|-----------------------|---------------------------------------|
| Odour | No specific odour. |
| рH | 7 (10% solution) |
| Boiling point | 1560.0 °C |
| Melting point | 960.0 °C |
| Flash point | Not available |
| Upper Flammable Limit | Not available |
| Lower Flammable Limit | Not available |
| Auto Ignition | Not available |
| Explosive properties | No. |
| Oxidising Properties | No. |
| Vapour Presure | Not available |
| Relative Density | 3.8560 °C |
| Water Solubility | 36% |

10. Stability & Reactivity

| Chemical Stability | Stable under normal conditions |
|-------------------------------------|--|
| Conditions to Avoid | No specific conditions. |
| Materials to Avoid | No specific materials to avoid. |
| Hazardous Decomposition Products | May produce hazardous fumes if involved in a fire. |

11. Toxicological Information

| Eyes | Contact with the solid or dust will be irritating to the eyes. |
|-----------|---|
| Skin | Contact with the solid or dust will be irritating to the skin. Chronic exposure may lead to dermatitis. |
| LD50 Skin | Not available |

11. Toxicological Information (continued)

| Ingest | Toxic if swallowed. May cause damage to central nervous system and kidneys. Soluble barium salts are rapidly absorbed from the G.I. tract and are very toxic orally. Symptoms include muscular stimulation and central nervous system effects. Fatal dose in humans is reported to be 0.8-0.9g but much larger amounts have been tolerated. Classed as an S1 poison. |
|----------------------|--|
| LD50 Ingest | Human LDlo:80mg/Kg |
| Inhalation | Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract. Inhalation of the dust can result in symptoms similar to those due to ingestion. |
| Carcinogenicity | Not considered to be a carcinogen. |
| Mutagenicity | Not considered to be a mutagen. |
| Reproductive Effects | None identified. |

12. Ecological

Marine and/or freshwater pollutant. Do not allow to enter drinking water supplies. The following applies to Barium Compounds: biological effects; Fish, lethal from 158mg/l. Salmon lethal from 158mg/l: L.Idus LC50: 870mg/l [both as BaCl2]. Barium ions are toxic for aquatic organisms: algae: Sc. quadricauda toxic from 34mg/l: Crustaceans toxic from 29mg/l.

13. Disposal Considerations

Disposal Methods Do not dispose of as domestic waste. Contaminated Packaging Wash out containers with water.

14. Transport Information

Proper Shipping Name UN Number UN Classification Subsidiary Risk Flash Point Packing Group Transport Category Marine pollutant ADR Hazard ID Barium Compound, N.O.S. 1564 6.1 Toxic None Not available III 2 No 60



15. Regulatory Information Labelling Toxic. Classification T Label Symbols T Fisk & safety Phrases Harmful by inhalation. Toxic if swallowed. Keep locked up and out of reach of children. In case of accident or if you feel unwell, seek medical advice immediately (show the label). EEC Number 233-788-1

16. Other Information

Document Information This document has been prepared in accordance with directive 88/379/EEC.

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.

16. Other Information (continued)

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