


## Section 1: Identification

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| <b>Common Name/Trade Name</b>     | Riboflavin 5-Phosphate Sodium (Anhydrous)  |  |
| <b>Supplier Information</b>       | Letco Medical, LLC<br>1316 Commerce Drive NW<br>Decatur, AL 35601<br>1 (800) 239-5288<br>+1 (734) 843-4693   | <b>IN CASE OF EMERGENCY:</b><br>Chemtec<br>1 (800) 424-9300 (24 hours) |
| <b>Distributor Name</b>           | Bella Corp Trading Pty Ltd<br>6/34 Dominions Road, Ashmore QLD 4214, Australia<br>Telephone: 07 5597 4169<br>Email: <a href="mailto:bellacorp@bellacorp.com.au">bellacorp@bellacorp.com.au</a> |  |
| <b>Product Synonym(s)</b>         | Riboflavin Phosphate Sodium  |  |
| <b>Relevant Use(s) of Product</b> | Manufacture or Compounding of Substances   |  |

## Section 2: Hazards Identification

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| <b>Classification of Substance or Mixture</b> | Specific target organ toxicity, single exposure Respiratory tract irritation (Category 3), Serious eye damage/eye irritation (Category 2A), Skin corrosion/irritation (Category 2) |  |
| <b>Signal Word</b>                            | Warning  |  |
| <b>Hazard Statement(s)</b>                    | H315<br>H319<br>H335   | Causes skin irritation<br>Causes serious eye irritation<br>May cause respiratory irritation  |
| <b>Pictogram(s)</b>                           |   |  |
| <b>Precautionary Statement(s)</b>             | P261<br>P264<br>P271<br>P280<br>P304+P340<br>P305+P351+P338<br>P312<br>P337+P313<br>P403+P233<br>P405  | Avoid breathing dust/fume/gas/mist/vapours/spray.<br>Wash hands thoroughly after handling.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing.<br>Call a POISON CENTER or doctor/physician if you feel unwell.<br>If eye irritation persists Get medical advice/attention.<br>Store in a well-ventilated place. Keep container tightly closed.<br>Store locked up. |
| <b>Hazards Not Otherwise Classified</b>       | No data available  |  |
| <b>Ingredient(s) with Unknown Toxicity</b>    | No data available  |  |

## Section 3: Composition/Information on Ingredients

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| <b>Chemical Name</b>                           | Riboflavin 5-Phosphate Sodium (Anhydrous) |
| <b>Common Name</b>                             | Riboflavin Phosphate Sodium               |
| <b>CAS Number</b>                              | 130-40-5                                  |
| <b>Impurities and/or Stabilizing Additives</b> | No data available                         |

## Section 4: First Aid Measures

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| <b>General Advice</b>                      | No data available  |
| <b>If Inhaled</b>                          | If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor, without delay. |
| <b>In Case of Skin Contact</b>             | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.   |
| <b>In Case of Eye Contact</b>              | If this product comes in contact with the eyes: Wash out immediately with fresh running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.                                  |
| <b>If Swallowed</b>                        | Immediately give a glass of water. First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.   |
| <b>Most Important Symptoms and Effects</b> | NOTES TO PHYSICIAN: Treat symptomatically.   |

## Section 5: Fire Fighting Measures

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| <b>Suitable Extinguishing Media</b>                       | Dry chemical, Carbon Dioxide, water spray or standard foam. For larger fires use water spray for or standard foam.   |
| <b>Special Hazards Arising From the Substance/Mixture</b> | Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result. Fire and Explosion Hazard: Combustible solid which burns but propagates flame with difficulty; it is estimated that most organic dusts are combustible (circa 70%) - according to the circumstances under which the combustion process occurs, such materials may cause fires and / or dust explosions.  |
| <b>Special PPE and/or Precautions for Firefighters</b>    | Use self-contained breathing apparatus, appropriate boots and rubber hand gloves. Move containers from fire area if possible. Extinguish fire from maximum distance. Stay away from storage tank ends. Dike fire control water for later treatment and disposal. Do not scatter material. Extinguish using agent suitable for type of surrounding fire. Avoided breathing vapours and dusts. Keep upwind. Precipitate gases/vapours mists with water spray. Personal Protective Equipment: Gloves, boots (chemical resistant). |

## Section 6: Accidental Release Measures

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| <b>Personal Precautions, Protective Equipment and Emergency Procedures</b> | Do not touch spilled material. Wear self-contained breathing apparatus, rubber boots and heavy rubber hand gloves Stop leak if you can do it without risk. Use water spray to reduce vapours. Wear protective clothing, gloves, safety glasses and dust respirator.  |
| <b>Methods and Materials Used for Containment</b>                          | Do not allow to enter drains or water ways.  |
| <b>Cleanup Procedures</b>  | For small spills, take up with sand or other absorbent material and place into containers for later treatment and disposal. For small dry spills, with clean shovel place material in to clean, dry, container and cover it. Move container from spill area. For larger spills, dike far ahead of spill for later treatment and disposal. Keep unnecessary people away. Isolate hazard area and deny entry. Ventilate closed spaces before entering. Use spill kits to contain spillage. Avoid raising dust and mist. Sweep up, shovel up or Vacuum up (consider explosion-proof machines designed to be grounded during storage and use). Place spilled material in clean, dry, sealable, labelled container. In case of major spills: Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing. Prevent, by any means available, spillage from entering drains or water courses. Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for scientific treatment and disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains. If contamination of drains or waterways occurs, advise Emergency Services. |

## Section 7: Handling and Storage

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| <b>Precautions for Safe Handling</b> | Handling: Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. DO NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers securely sealed when not in use. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use. Use good occupational work practice. |
| <b>Conditions for Safe Storage</b>   | Cool, Dry, well ventilated and protected from light protected from humidity. Store in original containers. Avoid storage with reducing agents. Avoid contamination / mixing with oxidizing agents as ignition may result. Avoid strong bases. Avoid light and moisture. Incompatible with salts of heavy metals. Store in original containers. Keep containers securely sealed.  |

## Section 8: Exposure Controls/Personal Protection

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| <b>Components with Workplace Control Parameters</b> | No data available  |
| <b>Appropriate Engineering Controls</b>             | Ventilation: Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction. Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace. If in spite of local exhaust an adverse concentration of the substance in air could occur, respiratory protection should be considered. Such protection might consist of: (a): particle dust respirators, if necessary, combined with an absorption cartridge; (b): filter respirators with absorption cartridge or canister of the right type; n(c): fresh-air hoods or masks Build-up of electrostatic charge on the dust particle, may be prevented by bonding and grounding. |
| <b>PPE - Eye/Face Protection</b>                    | Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean                            |
| <b>PPE - Skin Protection</b>                        | Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as: frequency and duration of contact, chemical resistance of glove material, glove thickness and dexterity Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. Contaminated gloves should be replaced. Gloves must only be worn on clean hands.  |
| <b>PPE - Body Protection</b>                        | Employee must wear appropriate protective gloves to prevent contact with this substance. Other protective clothing or equipment: Employee must wear appropriate protective (Impervious) clothing and equipment to prevent any possibility of skin contact with this substance.   |
| <b>PPE - Respiratory Protection</b>                 | Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures. The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).  |

## Section 9: Physical and Chemical Properties

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| <b>Appearance</b>                                   | Orange yellow crystalline powder with slight odour and bitter taste. Darkens in presence of moisture and light. |
| <b>Upper/Lower Flammability or Explosive Limits</b> | No data available   |
| <b>Odor</b>   | No data available   |
| <b>Vapor Pressure</b>                               | No data available   |
| <b>Odor Threshold</b>                               | No data available   |
| <b>Vapor Density</b>                                | No data available   |
| <b>pH</b>   | Neutral   |
| <b>Relative Density</b>                             | No data available   |
| <b>Melting Point/Freezing Point</b>                 | 282C  |
| <b>Solubility</b>                                   | Water soluble. Soluble in alcohol also.   |
| <b>Initial Boiling Point and Boiling Range</b>      | No data available   |
| <b>Flash Point</b>                                  | Data not available  |
| <b>Evaporation Rate</b>                             | No data available   |
| <b>Flammability (Solid, Gas)</b>                    | No data available   |
| <b>Partition Coefficient</b>                        | No data available   |
| <b>Auto-Ignition Temperature</b>                    | No data available   |
| <b>Decomposition Temperature</b>                    | No data available   |
| <b>Viscosity</b>                                    | No data available   |

## Section 10: Stability and Reactivity

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| <b>Reactivity</b>                         | No data available  |
| <b>Chemical Stability</b>                 | Stable under normal temperature and pressures or recommended conditions. In dry form relatively stable to light. |
| <b>Possibility of Hazardous Reactions</b> | No data available  |
| <b>Conditions to Avoid</b>                | Information not available. No hazardous reaction known.  |
| <b>Incompatible Materials</b>             | Information not available.   |
| <b>Hazardous Decomposition Products</b>   | Hazardous polymerization will not occur.   |

## Section 11: Toxicological Information

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| <b>Acute Toxicity - LD50 Oral</b>                         | Oral (rat) LD50: >10000 mg/kg*Skin (rabbit): non-Irritant (Draize)  |
| <b>Acute Toxicity - Inhalation</b>                        | No data available   |
| <b>Acute Toxicity - Dermal</b>                            | Skin (rabbit): non-Irritant (Draize)  |
| <b>Acute Toxicity - Eye</b>                               | Eye (rabbit): non-Irritant (Draize) * This material can cause eye irritation and damage in some persons.  |
| <b>Skin Corrosion/Irritation</b>                          | This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition. Skin contact is not thought to have harmful health effects (as classified under EC Directives); |
| <b>Serious Eye Damage/Irritation</b>                      | This material can cause eye irritation and damage in some persons.  |
| <b>Respiratory or Skin Sensitization</b>                  | The material can cause respiratory irritation in some persons.  |
| <b>Germ Cell Mutagenicity</b>                             | No data available   |
| <b>Carcinogenicity IARC</b>                               | No data available   |
| <b>Carcinogenicity ACGIH</b>                              | No data available   |
| <b>Carcinogenicity NTP</b>                                | No data available   |
| <b>Carcinogenicity OSHA</b>                               | No data available   |
| <b>Reproductive Toxicity</b>                              | No data available   |
| <b>Specific Target Organ Toxicity - Single Exposure</b>   | Specific target organ toxicity, single exposure Respiratory tract irritation (Category 3)   |
| <b>Specific Target Organ Toxicity - Repeated Exposure</b> | No data available   |
| <b>Aspiration Hazard</b>                                  | No data available   |

## Section 12: Ecological Information

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|--------------------------------------|---|
| <b>Toxicity</b>                      | Fish LC50 (96 h): Brachydanio rerio > 10000 mg/l Fish LC50 (48 h): Brachydanio rerio >10000 mg/l Bacteria (Pseudomonas putida) EC90 (0.5 h) >10000 mg/l Bacteria (Pseudomonas putida) EC50 (0.5 h) >10000 mg/l Bacteria (Pseudomonas putida) EC10 (0.5 h) >10000 mg/l |
| <b>Persistence and Degradability</b> | COD 1300 mg O2/g BOD5: <2 mg/g Dissolved Organic Carbon: 550 mg/g   |
| <b>Bio-accumulative Potential</b>    | Ingredient Persistence: Persistence: Air Bioaccumulation Mobility Water/Soil  |
| <b>Mobility in Soil</b>              | Ingredient Persistence: Persistence: Air Bioaccumulation Mobility Water/Soil  |
| <b>Other Adverse Effects</b>         | No data available   |

## Section 13: Disposal Considerations

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| <b>Waste Treatment Methods Product</b>               | Dispose product as Hazardous waste. Incinerate in an approved facility. Observe all federal state and local environmental regulations. Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.  |
| <b>Waste Treatment Methods Packaging</b>             | The packages shall be broken and buried away from inhabitation the used packages shall not be left to prevent their reuse package or surpluses material and washings should be disposed off in safe manner so as to prevent environment of water pollution. May burn but does not ignite readily. Containers may explode in heat of fire. Waste from residues- incinerate in qualified with flue gas scrubbing. Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified. Observe local/national regulations regarding waste disposal. |
| <b>Special Precautions Landfill or Incinerations</b> | Observe all state and local regulation when storing or disposing of this substance for assistance contact the central and state or district Environmental protection Agency/ Board.   |
| <b>Other Information</b>                             | No data available   |

## Section 14: Transport Information

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|-----------------------------------|----------------------|
| <b>UN Number</b>                  | Not dangerous goods. |
| <b>UN Proper Shipping Name</b>    | N/A                  |
| <b>Transport Hazard Class(es)</b> | N/A                  |
| <b>Packaging Group</b>            | N/A                  |
| <b>Environmental Hazards</b>      | Marine Pollutant: No |

## Section 15: Regulatory Information

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| No data available |
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## Section 16: Other Information

|                               |                  |
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| <b>Additional Information</b> | N/A              |
| <b>Prepared By</b>            | Scarlotte Smith  |
| <b>Revision Date</b>          | 06/01/2018 13:01 |

### Disclaimer

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