

Material Safety Data Sheet

According to 93/112/EC

Section 1: Chemical Product and Company Identification

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|----------------------|--|-------------------------|---|--------------------|
| Product Name: | CO-Oximeter Calibration Verification Controls | Catalog No: | CVC 223 | BIOMSDS-058 |
| | | Issue Date: | June, 2011 | MSDS Rev. C |
| Importer | | Manufacturer | | |
| Name: | | Name: | RNA Medical, Division of Bionostics, Inc. | |
| Address: | | Address: | 7 Jackson Road Devens, Massachusetts USA 01434-4026 | |
| Telephone: | | Telephone: | 978-772-9070 | 800-533-6162 |
| Fax: | | Fax: | 978-772-9071 | |
| Product Use: | For in vitro use for quality control of laboratory instrumentation | | | |
| Labeling Text | N/A | Danger Symbol(s) | N/A | |
| Shipping Name | N/A | IATA | N/A | |

Section 2: Composition / Information on Ingredients

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| Chemical Family: | bovine hemoglobin solution with inorganic salts | Chemical Name: | N/A |
| Component: | | Concentration Ranges: | |
| CAS Number: | | EEE Symbol / Risk Phrases: | |
| This product does not contain any hazardous chemicals at concentrations of 1% or greater. Furthermore, this product does not contain any known carcinogens at concentrations of 0.1% or greater. | | | |

Section 3: Hazards Identification

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| Eye Contact | May cause irritation if in contact with eye. |
| Skin Contact | Skin contact may cause irritation. |
| Ingestion | Though not a likely route of occupational exposure, ingestion of this product may cause choking, vomiting or nausea. |
| Inhalation | N/A |
| Chronic Exposure | N/A |

Section 4: First Aid Measures

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| Eye Contact | Although no adverse health reactions are expected from the normal use of this product, it is recommended flush eyes with water and seek medical advice whenever there has been a potential injury to the eye. |
| Skin Contact | If contact with this product leads to reddening, inflammation, or irritation, flush the exposed area with running water. If irritation persists, get medical attention. |
| Ingestion | As a precaution, get medical attention if there has been ingestion of this product. |
| Inhalation | If breathing becomes difficult, remove victim to fresh air. Get medical attention |
| Chronic Exposure | N/A |

Section 5: Firefighting Measures

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| Autoflammability | not determined |
| Flash Point (test method) | not determined |
| Extinguishing Media | Use fire extinguishing media appropriate for site conditions. |
| Special Firefighting Procedures | Structural fire fighting gear and self-contained breathing apparatus will provide adequate protection if this product is in a fire area. |
| Fire and Explosion Hazards | not determined |
| Hazardous Combustion Products | Thermal decomposition may emit carbon monoxide and carbon dioxide. |
| Upper Explosion Limit (%) | not determined |
| Lower Explosion Limit (%) | not determined |

Section 6: Accidental Release Measures

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| Spill and Leak Procedures | Use an absorbent material to contain/pick up the spilled solution. Place all contaminated disposables into a suitable container, seal, label and hold for disposal. |
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Section 7: Handling and Storage

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| Storage Temperature | Store vials as directed in the package insert. |
| Handling / Storage | Handle and store vials as directed in the package insert. |
| Ventilation Requirements | No special requirements |
| Sensitivity to Static Electricity | not known |
| Sensitivity to Mechanical Impact | not known |

Section 8: Exposure Controls / Personal Protection

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| Respiratory Protection | Respiratory protection is not required under normal use of this product. |
| Ventilation | Supplemental ventilation is not required for the normal use of this product. |
| Protective gloves | Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly. |

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| Other Protective Equipment | Wear appropriate eye protection to prevent eye contact. Wear appropriate body protection to prevent skin contact. |
| Other Engineering controls | Eye wash stations and deluge showers. |
| Work Practices | Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene. Do not place in mouth. |
| Hygienic Practices | Do not eat, drink, or smoke while working with this product. Upon completion of work activities involving this product, wash hands thoroughly with soap and water. |

Section 9: Physical and Chemical Properties

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| Pure substance or preparation | Preparation | Physical Form | Liquid |
| Appearance / Odor | Red, slight odor | pH AS is | neutral |
| Odor threshold | Not determined | Boiling point (760 mmHg) | not determined |
| Melting / Freezing point | Not determined | Solubility in Water | complete |
| Partition coefficient | Not determined | Relative density | not determined |
| Evaporation rate | Not determined | Vapor pressure (mmHg) | not determined |
| Vapor density (air = 1) | Not determined | Viscosity | not determined |
| Volatiles | Not determined | Volatile Organic Compounds | not determined |
| Autoflammability | Not determined | Flash point | not determined |
| Oxidizing properties | Not determined | | |

Section 10: Chemical Properties and By Products

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| Stability | Stabile |
| Materials to avoid | Strong bases, strong acids and water reactive materials |
| Hazardous decomposition products | Thermal decomposition may emit carbon monoxide and carbon dioxide. |

Section 11: Toxicological Information

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| Route of Entry | Ingestion, skin and/or eye contact. |
| Effects of chronic exposure | Not known |
| Special health effects | Not known |
| Cancer Lists | N/A |
| Ingredient | N/A |

Section 12: Ecological Information

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|---------------------------------|-----------|----------------------------|-----------|
| Potential effect on environment | Not known | Potential to bioaccumulate | Not known |
| Mobility | Not known | Ecotoxicity | Not known |
| Persistence and degradability | Not known | Aqua toxicity | Not known |

Section 13: Disposal Considerations

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| Waste disposal | Please consult local, state and federal regulations for additional guidance on disposal. |
| Empty container warnings | not known |

Section 14: Transport Information

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| ADR / RID | not known | CEPIC Tremcard number | not known |
| Hazchem code | not known | Kemmler code | not known |
| IMDG classification | not known | IATA classification | not known |
| Marine Pollutant | not known | UN number (S.I.N) | not known |
| UN class | not known | UN packing group | not known |

Section 15: Regulatory Information

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| EEC hazard classification | not known |
| Risk phrases | not known |
| Safety phrases | not known |
| MSDS is available on website as indicated. | <input type="checkbox"/> Not applicable <input type="checkbox"/> OEM responsibility <input checked="" type="checkbox"/> Specify Website: www.RNAMedical.com |

Section 16: Other Information

Directives 88/379/EEC and 91/155/EEC have been considered when compiling this SDS; the information is provided for health and safety assessment by an industrial user. Reference should be made to any relevant local or national health, safety or environmental legislation. This information does not constitute indication of suitability for specific uses.

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