

Material Safety Data Sheet

Section 1- Product Information

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| Product Name | Ranibizumab |
| Catalog No. | XXXXXX |
| Identified uses | Biochemical research/analysis |
| Company | BioMetas (Shanghai) Limited 2F, 330 Aidisheng Road Zhangjiang High Tech Park Pudong New Area Shanghai, China |

Section 2- Composition/information on ingredients

No components need to be disclosed according to the applicable regulations.

Section 3- Hazards Identification

| | |
|--------------|---|
| HMIS Rating | |
| Health | 0 |
| Flammability | 0 |
| Reactivity | 0 |
| NFPA Rating | |
| Health | 0 |
| Flammability | 0 |
| Reactivity | 0 |

For additional information on toxicity, please refer to Section 11.

Section 4- First Aid Measures

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| Oral Exposure | If swallowed, wash out mouth with water provided person is conscious. Call a physician. |
| Inhalation Exposure | If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. |
| Dermal Exposure | In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician. |
| Eye Exposure | In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. |

Section 5- Fire Fighting Measures

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| Flash Point | Not available |
| Autoignition Temp | Not available |
| Flammability | Not available |
| Extinguishing Media Suitable | Water spray. Carbon dioxide, dry chemical powder, or appropriate foam. |
| Fire Fighting Protective Equipment | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. |
| Specific Hazard(s) | Emits toxic fumes under fire conditions |

Section 6- Accidental Release Measures

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| Procedure to Be Followed in Case of Leak or Spill | Evacuate area |
| Procedure(s) of Personal Precaution(s) | Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves |
| Methods for Cleaning Up | Sweep up, place in a bag and hold for waste disposal. |

Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7- Handling and Storage

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| Handling | |
| User Exposure | Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. |
| Storage | Tightly closed. Storage at -80°C. Transport with dry ice. |

Section 8- Exposure Controls/Personal Protection Equipment

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| Engineering Controls | Mechanical exhaust required |
| Personal Protective Equipment | |
| Respiratory | Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) respirator. |
| Other | Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. |
| General Hygiene Measures | Wash thoroughly after handling |

Section 9- Physical and Chemical Properties

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| Appearance | |
| Physical State | Form: liquid |
| Property | |
| pH | Not available |
| BP/BP Range | Not available |
| MP/MP Range | Not available |
| Freezing Point | Not available |
| Vapor Pressure | Not available |
| Vapor Density | Not available |
| Saturated Vapor Conc. | Not available |
| SG/Density | Not available |
| Bulk Density | Not available |
| Odor Threshold | Not available |
| Volatile% | Not available |
| VOC Content | Not available |
| Water Content | Not available |
| Solvent Content | Not available |
| Evaporation Rate | Not available |
| Viscosity | Not available |
| Surface Tension | Not available |
| Partition Coefficient | Not available |
| Decomposition Temp. | Not available |
| Flash Point | Not available |
| Explosion Limits | Not available |
| Flammability | Not available |
| Autoignition Temp | Not available |
| Refractive Index | Not available |
| Optical Rotation | Not available |
| Miscellaneous Data | Not available |
| Solubility | Not available |

Section 10- Stability and Reactivity

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| Stability | |
| Stable | Stable |
| Hazardous Decomposition Products | |
| Hazardous Decomposition Products | Nature of decomposition products not known |

Section 11- Toxicological Information

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| Route of Exposure | |
| Skin Contact | May cause skin irritation |
| Skin Absorption | May be harmful if absorbed through the skin |
| Inhalation | Material may be irritating to mucous membranes and upper respiratory tract, May be harmful if inhaled. |
| Ingestion | May be harmful if swallowed |
| Conditions Aggravated by Exposure | The toxicological properties have not been thoroughly investigated. |

Section 12- Ecological Information

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| Eco-toxicity | |
| Toxicity of The Products of Biodegradation | The product itself and its products of degradation are not toxic. |

Section 13- Disposal Considerations

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| Appropriate Method of Disposal | Waste must be disposed of in accordance with federal, state and local environmental control regulations. |
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Section 14- Transport Information

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| DOT | |
| Proper Shipping Name | None |
| Non-Hazardous for Transport | This substance is considered to be non-hazardous for transport. |
| IATA | |
| Non-Hazardous for Air Transport | Non-hazardous for air transport |

Section 15- Regulatory Information

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| United States Regulatory information | |
| SARA Listed | No |
| Canada Regulatory Information | |
| WHMIS Classification | This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR. |
| DSL | No |
| NDSL | No |

Section 16- Other Information

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| Disclaimer | For research use only |
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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.