

## Material Safety Data Sheet

|   |  |                           | Date Created<br>Date Updated<br>Version | 03/22/201<br>1.1 |
|---|--|---------------------------|---|------------------|
| Section 1- Product Information                                  |  |                           | VEISIUIT                                | 1.1              |
|   | Done Morphe constis Drotain 7            |                           |   |                  |
| Product Name:<br>Product Cat. No.:                              | Bone Morphogenetic Protein-7 (<br>Z02751 | BMP-7), Human             |   |                  |
| Section 2- Composition / Information                            | on on Ingredients                        |                           |   |                  |
| Substance / Preparation:  | Substance                                |                           |   |                  |
| Ingredient Name   | Bone Morphogenetic Protein-7 (           | BMP-7). Human             |   |                  |
| CĂS No.   | No                                       |                           |   |                  |
| SARA 313  | No                                       |                           |   |                  |
| Section 3- Hazards Identification                               |  |                           |   |                  |
| HMIS Rating   |  |                           |   |                  |
| Health  | 0  |                           |   |                  |
| Flammability  | 0  |                           |   |                  |
| Reactivity  | 0  |                           |   |                  |
| NFPA Rating   | ů –                                      |                           |   |                  |
| Health  | 0  |                           |   |                  |
| Flammability  | 0  |                           |   |                  |
|   | 0  |                           |   |                  |
| Reactivity<br>or additional information on toxicity, please ref | •  |                           |   |                  |
| Section 4- First Aid Measures                                   |  |                           |   |                  |
| Oral Exposure   | If swallowed, wash out mouth physician.  | with water provided p     | person is conscio                       | ous. Call        |
| Inhalation Exposure   | If inhaled, remove to fresh air.         | If broathing bocomos d    | ifficult call a phys                    | vicion           |
| Dermal Exposure   | In case of skin contact, flush wi        |                           |   |                  |
|   | Remove contaminated clothing             |                           |   | 15 minutes       |
| Eye Exposure  | In case of contact with eyes, f          | lush with conjous amo     | unts of water for                       | at least 1       |
|   | minutes. Assure adequate flus            |                           |   |                  |
|   |  | sning by separating the   | e eyends with hing                      | ers. Call        |
|   | physician.                               |                           |   |                  |
| Section 5- Fire Fighting Measures                               |  |                           |   |                  |
| Flash Point   | Not available                            |                           |   |                  |
| Autoignition Temp   | Not available                            |                           |   |                  |
| Flammability  | Not available                            |                           |   |                  |
| Extinguishing Media   | Not available                            |                           |   |                  |
| Suitable  | Water enroy Carbon diavide dr            | v chomical powdar, ar a   | noronriata faam                         |                  |
|   | Water spray. Carbon dioxide, dr          | y chemical powder, or a   | appropriate toarn.                      |                  |
| Fire Fighting   |  |                           |   |                  |
| Protective Equipment  | Wear self-contained breathing a          | apparatus and protective  | e clothing to pre-                      | vent contac      |
|   | with skin and eyes.                      |                           |   |                  |
| Specific Hazard(s)  | Emits toxic fumes under fire cor         | Iditions                  |   |                  |
| Section 6- Accidental Release Meas                              |  |                           |   |                  |
| Procedure to Be Followed in Case of                             | Evacuate area                            |                           |   |                  |
| Leak or Spill   |  |                           |   |                  |
| Procedure(s) of Personal Precaution(s)                          | Wear respirator, chemical safety         |                           |   |                  |
| Methods for Cleaning Up   | Sweep up, place in a bag a               |                           |   | aising dus       |
|   | Ventilate area and wash spill site       | e after material pickup i | s complete.                             |                  |
| Section 7- Handling and Storage                                 |  |                           |   |                  |
| Handling  |  |                           |   |                  |
| User Exposure   | Avoid inhalation. Avoid contact          | t with eyes, skin, and o  | clothing. Avoid p                       | orolonged o      |
|   | repeated exposure.                       |                           |   | -                |
| Storage   | This lyophilized preparation is s        | table at 2-8 °C, but sho  | uld be kept at -20                      | °C for long      |
| -   | term storage, preferably desicca         |                           |   | 0                |
|   |  |                           |   |                  |
|   | ) Centennial Ave., Piscataway, NJ        |                           |   |                  |
| Toll-free Tel: 1-877-436-7274 Fax:                              | 1-732-210-0262 Email: pro                | duct@genscript.com        | Web: www.gensc                          | ript.com         |



## Section 8- Exposure Controls/Personal Protection Equipment

| 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**

| Appearance                            |   |  |
|---------------------------------------|---|--|
| Physical State                        | Lyanhilizad powdar  |  |
|                                       | Lyophilized powder  |  |
| Property<br>Melocular Waight          | 15.6 kDo  |  |
| Molecular Weight                      | ~15.6 kDa   |  |
| 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   |  |
|                                       | Soluble in water  |  |
| Solubility                            | Soluble III water   |  |
| Section 10 Stability and Depativity   |   |  |
| Section 10- Stability and Reactivity  |   |  |
| Stability                             | 0:  |  |
| Stable                                | Stable  |  |
| Hazardous Decomposition Products      |   |  |
| Hazardous Decomposition Products      | Nature of decomposition products not known                                      |  |
|                                       |   |  |
| Section 11- Toxicological Information | n   |  |
| 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**



| Eco-toxicity<br>Toxicity of The Products of<br>Biodegradation | The product itself and its products of degradation are not toxic.  |  |  |
|---|--|--|--|
| Section 13- Disposal Considerations                           | 3  |  |  |
| Appropriate Method of Disposal of Substance or Preparation    | Waste must be disposed of in accordance with federal, state and local environmental control regulations.   |  |  |
| Section 14- Transport Information                             |  |  |  |
| 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                            |  |  |  |
| 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                                 |  |  |  |

Disclaimer

For *in vitro* research use only.

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