# Material Safety Data Sheet 

| Date Created | $2 / 25 / 2013$ |
| :--- | :--- |
| Date Updated | $3 / 18 / 2022$ |
| Version | 1.2 |

Section 1- Product Information

| Product Name: | VEGF164, Rat (CHO-expressed) |
| :--- | :--- |
| Product Cat. No.: | Z03006-10; Z03006-50; Z03006-1 |

Section 2- Composition / Information on Ingredients

| Substance / Preparation: | Su |
| :--- | :--- |
| Ingredient Name | VE |
| CAS No. | No |
| SARA 313 | No |
| Section 3- Hazards Identification |  |
| HMIS Rating |  |
| Health |  |
| Flammability | 0 |
| Reactivity | 0 |
| NFPA Rating | 0 |
| Health | 0 |
| Flammability | 0 |
| Reactivity | 0 |

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

## Section 4- First Aid Measures

| 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. |
| Eye Exposure | Remove contaminated clothing and shoes. Call a physician. |
|  | 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

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

## Section 6- Accidental Release Measures

| Procedure to Be Followed in Case of | Evacuate area |
| :--- | :--- |
| Leak or Spill |  |
| 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 <br> area and wash spill site after material pickup is complete. |

## Section 7- Handling and Storage

Handling

User Exposure
Storage

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
Lyophilized recombinant Rat Vascular Endothelial Growth Factor 165 (VEGF165) remains stable up to 6 months at $-80^{\circ} \mathrm{C}$ from date of receipt. Upon reconstitution, rrVEGF165 should be stable up to 1 week at $4^{\circ} \mathrm{C}$ or up to 2 months at $-20^{\circ} \mathrm{C}$.

Section 8- Exposure Controls/Personal Protection Equipment

| Engineering Controls | Mechanical exhaust required |
| :--- | :--- |
| Personal Protective Equipment | Use respirators and components tested and approved under appropriate |
| $\quad$ Respiratory | 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 |
| General Hygiene Measures | goggles, other protective clothing. |

## Section 9- Physical and Chemical Properties

| Appearance |  |
| :--- | :--- |
| Physical State | Lyophilized pow |
| Property | $35-48 \quad$ kDa |
| Molecular Weight | Not available |
| 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 |  |

Section 10- Stability and Reactivity

| Stability <br> Stable | Stable |
| :--- | :--- |
| Hazardous Decomposition Products <br> Hazardous Decomposition Products | Nature of decomposition products not known |
|  |  |
| Section 11- Toxicological Information |  |
| Route of Exposure | May cause skin irritation |
| Skin Contact May be harmful if absorbed through the skin <br> Skin Absorption Material may be irritating to mucous membranes and upper respiratory tract, May <br> Inhalation be harmful if inhaled. <br> $\quad$ Ingestion May be harmful if swallowed <br> Conditions Aggravated by Exposure The toxicological properties have not been thoroughly investigated. |  |

## Section 12- Ecological Information

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

## 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

GenScript corporation MSDS is believed to be correct but only used as a guide for experienced personnel, GenScript shall not be held liable for any damage resulting from the handling or from contact with the above product.

