

# Material Safety Data Sheet

## Section 1-Product Information

Product name rhGM-CSF, human  
Product Cat. No. Z02695

## Section 2-Composition / Information on Ingredients

| Substance Name                                       | CAS No.    | SARA 313 |
|--|------------|----------|
| rhGM-CSF,<br>Ingredient Name                         | None       | No       |
| Na <sub>2</sub> HPO <sub>4</sub> .12H <sub>2</sub> O | 10039-32-4 | No       |
| NaH <sub>2</sub> PO <sub>4</sub> .2H <sub>2</sub> O  | 13472-35-0 | No       |

## Section 3- Hazards Identification

### Emergency Overview

Caution The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.

### HMIS Rating

Health Not available

Flammability Not available

Reactivity Not available

### NFPA Rating

Health Not available

Flammability Not available

Reactivity Not available

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. 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

Flash Point Not available

Autoignition Temp Not available

Flammability Not available

Extinguishing Media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Fire Fighting

Protective Equipment Wear self contained breathing apparatus for fire fighting if necessary.

Specific Hazard(s) Emits toxic fumes under fire conditions.

## Section 6- Accidental Release Measures

|   |   |
|---|---|
| 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

|                  |  |
|------------------|--|
| Handling         |  |
| User Exposure    | Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. |
| Storage          |  |
| Suitable         | Keep tightly closed  |
| Storage at -20°C |  |

### Section 8-Exposure Controls/Personal Protection Equipment

|                               |   |
|-------------------------------|---|
| Engineering Controls          | Mechanical exhaust required   |
| Personal Protective equipment |   |
| Respiratory                   | Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |
| 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        | powder, lyophilized |
| Property              |                     |
| Molecular Weight      | 14.6 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       |
| Solubility            | Not available       |

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**Section 10- Stability and Reactivity**

|                                  |  |
|----------------------------------|--|
| Stability                        |  |
| Stable                           | Stable under recommended storage conditions.   |
| Hazardous Decomposition Products |  |
| Hazardous Decomposition Products | Hazardous decomposition products formed under fire conditions. Nature of decomposition products not known. |
| Hazardous Polymerization         |  |
| Hazardous Polymerization         | Will not occur   |

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**Section 11- Toxicological Information**

|                                   |   |
|-----------------------------------|---|
| Route of Exposure                 |   |
| Skin                              | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes                              | May cause eye irritation.   |
| Inhalation                        | May be harmful if inhaled. May cause respiratory tract irritation.  |
| Ingestion                         | May be harmful if swallowed   |
| Conditions Aggravated by Exposure | Not available   |

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**Section 12- Ecological Information**

No data available.

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**Section 13- Disposal Considerations**

|  |  |
|--|--|
| Appropriate Method of Disposal of Substance or Preparation | Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. |
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**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                                 |

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**Section 15- Regulatory Information**

|                                      |  |
|--------------------------------------|--|
| US Classification and Label Text     |  |
| US Statements                        | Caution: The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.            |
| 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   |

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**Section 16- Other Information**

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.