

# Material Safety Data Sheet

Date Created 06/10/2010  
Date Updated  
Version 1.1

## Section 1-Product Information

Product name VEGF, human  
Product Cat. No. Z02689

## Section 2-Composition / Information on Ingredients

Substance Name	CAS No.	SARA 313
Human VEGF	None	No
Ingredient Name		
Na <sub>2</sub> HPO <sub>4</sub> .12H <sub>2</sub> O	10039-32-4	No
KH <sub>2</sub> PO <sub>4</sub>	7778-77-0	No
NaCl	7647-14-5	No
KCl	7447-40-7	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 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

Oral Exposure If swallowed, never give anything by mouth to an unconscious person. Rinse mouth with water.

Inhalation Exposure If breathed in, move person into fresh air. If not breathing give artificial respiration

Dermal Exposure In case of skin contact, wash off with soap and plenty of water.

Eye Exposure In case of eye contact, Flush eyes with water as a precaution.

## 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.

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**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.

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**Section 7-Handling and Storage**

Handling	
User Exposure	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Storage	
Suitable	Keep container tightly closed in a dry and well-ventilated place.
Storage	Keep in properly labelled containers

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**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

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**Section 9- Physical and Chemical Properties**

Appearance	
Physical State	powder, lyophilized
Property	
Molecular Weight	38.2 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.