Material Safety Data Sheet



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product code : IR-103 Product name : Gel4Cell[®]-VEGF

1.2 Application of the substance / the mixture

Identified uses: For Research Use Only. Not intended for use in human diagnostic or therapeutic procedures.

1.3 Details of the supplier of the safety data sheet

Company	: InnoRegen,Inc., 604,88 Dongnae-Ro, Dong-Gu, Daegu Republic of Korea 41404
Telephone	: +82-53-745-5447
Fax	: +82-53-311-5447
E-mail address	: info@innoregen.com

1.4 Emergency telephone number

Emergency Phone # : +82 53-745-5447

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

2.2 Label elements

The product does not need to be labeled.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

4.1Description of first aid measures

In case of skin contact

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

If inhaled

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

If swallowed

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Dilute with plenty of water.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

No dangerous substances are released. See Section 7 for information on safe handling. See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

7.3 Specific end uses

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Engineering measures

Ensure adequate ventilation, especially in confined areas.

8.3 Personal protective equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Eye protection Wear safety glasses with side shields (or goggles).

Hand protection Impervious gloves

Skin and Body Protection Lightweight protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. **Hygiene measures** Handle in accordance with good industrial hygiene and safety practice

8.4 Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	Form: gel
	Color: light beige
b) Odor	no data available
c) Odor Threshold	no data available
d) pH	5.0 – 7.5 at 60 °C

e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	no data available
I) Vapor density	no data available
m) Relative density	no data available
n) Water solubility	no data available
 Partition coefficient: n-octanol/water 	no data available
p) Autoignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

9.2 Other safety information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Exposure to high temperature may affect product quality.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicityno data availableSkin corrosion/irritationno data availableSerious eye damage/eye irritationno data availableRespiratory or skin sensitizationno data availableGerm cell mutagenicityno data availableCarcinogenicityno data availableReproductive toxicityno data available

Specific target organ toxicity - single exposure	no data available
Specific target organ toxicity - repeated exposure	no data available
Aspiration hazard	no data available

11.2 Principle routes of exposure Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

SECTION 12: Ecological information

12.1 Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.2 Persistence and degradability

Not available

12.3 Bioaccumulative potential

Not known

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects

No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

13.2 Uncleaned packagings

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

SECTION 14: Transport information

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Proper Shipping Name	No dangerous good in sense of these transport regulations
Hazard Class	None
Subsidiary class	None
Packing group	None
UN-No	None
Environmental hazards	None

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available

15.2 Chemical Safety Assessment

No data available

SECTION 16: Other Information

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

The information in this SDS does not constitute a warranty, expressed or implied, including any implied warranty of merchantability or fitness for any particular purpose.

Department issuing SDS:

InnoRegen, Inc.

Date of preparation / last revision: Nov 24th 2016 / Sep 23th 2020 Abbreviations and acronyms:

IATA: International Air Transport Association

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative



Material Safety Data Sheet– Product IR-103