

SAFETY DATA SHEET

Issue date: 12 Mar. 2020 (Ver. 2)

SECTION 1. Identification

Product name: iMatrix-221
Product code: 892 061, 892 062, 892 063, 892 065, 892 066
Synonyms: Recombinant human laminin-221 E8 fragment protein
Application: Culture substrate for cardiomyocytes, skeletal muscle cells,
and laminin-221-adhesive cells
Manufacturer: Nippi, Incorporated
Department: Biological and Chemical Products Division
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SECTION 2. Hazard identification

GHS classification: Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)
Other hazards: Not available

SECTION 3. Composition/Information on ingredients

0.5 mg/mL Recombinant human laminin-221 E8 fragment protein
Solvent: PBS(-)

SECTION 4. First aid measures

Inhalation: Remove from exposure area to fresh air immediately. Perform artificial respiration, if necessary.
Skin contact: Immediately wash with water and/or warm water.
Eye contact: Immediately rinse with plenty of water.
Ingestion: Vomit immediately.

SECTION 5. Fire-fighting measures

Fire extinguisher: Can use all kind of fire extinguisher.
Specific noxiousness: No information available
Fire-fighting: Use a water and/or fire extinguisher. Move container from fire area, if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Keep upwind avoiding inhalation of hazardous vapors.
Protection of worker for fire-fighting: Recommend that worker wear protective equipment.

SECTION 6. Accidental release measures

Keep unnecessary people away. Recommend that worker wear protective equipment. Beware adhesion to skin and inhalation of materials. Gather spilled materials and dispose of waste according to Federal, State and Local Regulations. Do not flush spilled material into sewer, because BOD and COD values of the waste-water increase. Wash out small amount of spilled material by water and/or warm water.

SECTION 7. Handling and storage

Handling: Do not get wet strictly. Do not handle by bare hands. Use local exhaust ventilation, if necessary.
Recommend that worker wear protective equipment and improve the ventilation of a room.

Storage: Avoid high temperature/humidity. Store at 2 to 15°C. Avoid sunlight and ultraviolet light. Avoid contact with moisture and/or proteolytic substance. Keep container tightly closed.

SECTION 8. Exposure controls/personal protection

Permissible exposure limit:	No data available
Equipment:	Recommend that provide local exhaust ventilation
Respiratory protection:	Masks, respirator
Gloves:	Appropriate protective gloves
Eye Protection:	Safety glasses
Clothing:	Appropriate protective (impervious) clothing

SECTION 9. Physical and chemical properties

Appearance:	Colorless liquid
Odor:	Odorless
Melting point/Freezing point:	No data available
Boiling point and range:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	7.0 - 7.5
Viscosity:	No data available
Solubility:	No data available
Partition coefficient: n-octanol/water:	No data available
Vapor pressure:	No data available
Relative density:	No data available
Relative gas density:	No data available
Particle characteristics:	No data available

SECTION 10. Stability and reactivity

Reactivity:	No hazardous reaction for most materials.
Chemical stability:	Stable under normal condition. But decomposed by proteolytic enzymes, acid and alkali.
Conditions to avoid:	Avoid contact with strong oxidizers, open flame, high temperatures, sparks and the direct rays of the sun.
Incompatible materials:	No data available
Possibility of hazardous reactions:	No data available
Hazardous decomposition products:	No data available

SECTION 11. Toxicological information

Acute toxicity:	No data available
Skin corrosion/irritation:	No data available
Serious eye damage/eye irritation:	No data available
Respiratory or Skin sensitization:	No data available
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No 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

SECTION 12. Ecological information

Ecotoxicity: No information available
Persistence and degradability: No information available
Bioaccumulative potential: No information available
Movability in soil: No information available
Other adverse effects: No information available
Hazardous to the ozone layer: No information available

SECTION 13. Disposal considerations

Use a large quantity of water to avoid increasing of BOD and COD values. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

SECTION 14. Transport information

UN Number: Not available
UN proper shipping name: ADR/RID: Not dangerous goods, IMDG: Not dangerous goods,
IATA: Not dangerous goods
Transport hazard class: Not applicable
Environmental hazards: No information available
Special precautions for user: Avoid contact with strong oxidizers, open flame, high temperatures, sparks and the direct rays of the sun.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

SECTION 15. Regulatory information

Japanese regulations

Fire Service Act: Not applicable
Poisonous and Deleterious: Not applicable
Substances Control Law: Not applicable
Industrial Safety and Health Act: Not applicable
Regulations for the carriage and storage of dangerous goods in ship: Not applicable
Civil Aeronautics Law: Not applicable
Pollutant Release and Transfer Register Law: Not applicable
Export Trade Control Order: Not applicable

SECTION 16. Other information

No other special information

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Nippi, Inc. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See our website <https://www.nippi-inc.co.jp/english/tabid/74/Default.aspx> and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.