

SAFETY DATA SHEET

Issue date: 12 Mar. 2020 (Ver. 4)

SECTION 1. Identification

Product name: iMatrix-511
Product code: 892 011, 892 012, 892 013, 892 015, 892 017
Synonyms: Recombinant human laminin-511 E8 fragment protein
Application: Culture substrate for iPS cells, ES cells, and laminin-511-adhesive cells
Manufacturer: Nippi, Incorporated
Department: Biological and Chemical Products Division

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-511 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.

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SECTION 8. Exposure controls/personal protection

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| 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

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|---|-------------------|
| Appearance: | Colorless liquid |
| Odor: | Odorless |
| Melting point/Freezing point: | No data available |
| Boling 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

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| 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

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

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SECTION 12. Ecological information

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

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|---|---|
| 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

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| 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

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