



FastGene® Unstained Protein Marker

Cat. No.	Product	Content
MWP07	FastGene® Unstained Protein Marker	0.5 mL

1. Identity of the substance and the manufacturer

1.1. Name of the substances or preparations

FastGene® Unstained Protein Marker

1.2. Recommended use of the chemical and restrictions on use

Laboratory research use only.

1.3. Name and address of the manufacturer

NIPPON Genetics EUROPE GmbH
Mariaweilerstraße 28 a
52349 Düren
Germany

1.4. Emergency telephone contact

+49 2421/554960

2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Not applicable.

2.1.2. Information concerning particular hazards for human and environment

The product does not have to be labeled due to the calculation procedure of international guidelines.



2.1.3. Classification system

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

2.2. Labelling elements

2.2.1. Labelling according to the to the EU guidelines

Observe the general safety regulations when handling chemicals. The product is not subjected to identification regulations according to directives on hazardous materials.

2.2.2. Classification system

NFPA ratings (scale 0 - 4)



HMIS-ratings (scale 0 - 4)



2.3. Other hazards

On PBT or vPvB properties of the product or its ingredients according to the criteria of REACH Annex XIII no information is available.

Physical-chemical hazardous effects are unknown. On complains and symptoms as well as to harmful effects no data are available.

3. Composition/information about the components

3.1. Substances

Not relevant.

3.1. Mixtures

2.1.3. Chemical characterization



Solution, consisting of the following components.

Chemical	EC No.	CAS No.	Content	Classification
Glycerol	200-289-5	56-81-5	15%	no relevance
Sodium Dodecyl Sulfate (SDS)	205-788-1	151-21-3	2%	no relevance
Urea	200-315-5	57-13-6	3.6M	no relevance
Tris-Phosphate	230-260-2	6992-39-8	20mM	no relevance
Dithiothreitol (DTT)	248-531-9	3483-12-3	0.2mM	no relevance

Components not listed here are not hazardous or their concentration do not exceed the limits specified in the OSHA Hazard Communication Standard 29 CFR 1910.1200.

4. First-aid measures

4.1. General information



No special measures.

4.2. Description of necessary first-aid measures

4.2.1. Inhalation

Remove the affected person to fresh air, bring to rest position, keep warm. If complains and symptoms occur seek medical advice.

4.2.2. Skin contact

Generally, the product does not irritate the skin.

4.2.3. Eye contact



Thoroughly wash the eyes on spread lids with flowing fresh water for 15 minutes, previously remove contact lenses if possible. Provide ophthalmological treatment.



4.2.4. Ingestion

Don't induce vomiting. Let rinse the mouth, let spit of the liquid and let drink copious amounts of water. If complains and symptoms occur seek medical advice.

4.3. Most important symptoms and effects, both acute and delayed

Not relevant.

4.4. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. In case of fire

5.1. Suitable extinguishing agents



The product is not combustible, adapt the measures to the environment: water spray, carbon dioxide, extinguishing foam and dry extinguishing agent.

5.2. Not suitable extinguishing agents

No information available.

5.3. Special hazards arising from the substance or mixture



No further information available.

5.4. Advice for fire fighters



Use a self-contained breathing apparatus (SCBA) at poor ventilation and in closed rooms. Wear protection cloth. Adapt the extinguishing media and fire-fighting measures to the environment.



6. In case of spillage

6.1. Personal precautions, protective equipment and emergency procedures

Mind the protection measures (section 8). Avoid the contact with eyes. No further precautions required.

6.2. Environmental precautions

Do not allow to enter sewers / surface waters / ground water. Remove fire residues and contaminated aqueous wastes in suitable containers and dispose of them in a controlled manner.

6.3. Methods and materials for containment and cleanup

Take up with liquid-binding agents, e.g. universal binder, treat material as described in section 13 „Disposal considerations“. Clean contaminated surfaces with water.

6.4. Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. Handling and storage

7.1. Safe handling

7.1.1. Information on safe use

Avoid inhalation of aerosol, contact with eyes. Provide sufficient ventilation of the working room (local exhaust ventilation if needful).

7.1.2. Information on fire and explosion protection

No special measures needful.

7.1.3. Handling rules

On workplaces only keep available amounts necessary for work progress. Don't leave receptacles stand open. Avoid spilling, preferable handle with non-breakable receptacles or use suitable protection containers on transportation of breakable receptacles.



7.2. Safe storage

7.2.1. Technical measures and storage conditions

Keep opened container tightly closed again and stored upright to prevent leakage. Always keep in containers of the same material as the original. Storage temperature 4 ° C recommended. Keep away from sunlight.

7.2.2. Packing materials

Packing materials must be tested for durability before use.

7.2.3. Requirements for storage rooms and containers

Do not use food containers because of the risk of confusion. Label containers clearly and permanently. If possible, keep in the original container, keep container tightly closed.

7.2.4. Information on cumulative storage

Storage class: no required

7.2.5. Further information to the storage conditions

None.

7.3. Specific end uses

None.

8. Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limits

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

8.1.2. Additional information

The list that was valid during the creation were used as basis.



8.2. Exposure controls

8.2.1. Personal protection

8.2.1.1. Respiratory protection



Not required.

8.2.1.2. Hand protection



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves: the selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can't be calculated in advance and has therefore to be checked prior to the application.

8.2.1.3. Eye protection



Eye protection goggles with side protection (EN 166).

8.2.1.4. Skin protection

Use clothing usual in the chemical industry. Skin protection agents are not as effective as protective gloves, so they should be preferred as much as possible. If no protective gloves can be worn, apply water-insoluble skin protection preparations to the clean skin before starting work and after every break. Before breaks and at the end of work, skin cleansing with soap and water is required. After cleansing, use a greasy skin care product.

8.2.1.5. Body protection



Special body protection generally not required, normal work clothes adequate.



8.2.1.6. General protection and hygiene measure



Do not eat, drink or smoke during working hours. Keep away from food and drink. Avoid contact with eyes and skin. Remove contaminated and soaked clothing immediately. Wash hands before breaks and after work.

8.2.2. Limitation of the environmental exposure

Avoid leaks and spills.

8.2.3. Limitation of the consumer's exposure

Avoid inhalation of vapors, mists or gases, remove sources of ignition.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	blue
Odour	Odourless
Odour threshold	Not determined
pH	7.5
Melting point/freezing point	Undetermined
Initial boiling point and boiling range	Void
Flash point	>100°C (<212°F)
Flammability (solid, gas)	Not applicable.
Decomposition temperature	Not determined
Auto-ignition temperature	Product is not selfignition
Explosive properties	Product does not present and explosion hazard
Lower explosion limits	Not determined
Upper explosion limits	Not determined
Vapour pressure	Not applicable
Density	Not determined
Relative density	Not determined
Evaporation rate	Not determined
Solubility in / Miscibility with water	Not miscible or difficult to mix
Partition coefficient: n-octanol/water	Not determined



Partition coefficient: n-octanol/water	Not determined
Dynamic viscosity	Not applicable
Kinematic viscosity	Not applicable

9.2. Other information

Not relevant.

10. Stability and reactivity

10.1. Reactivity

Not reactive under the intended use and storage conditions.

10.2. Chemical stability

Chemically stable under the intended use and storage conditions.

10.3. Possibility of hazardous reactions

Unknown under the intended use and storage conditions.

10.4. Conditions to avoid

No further relevant information available.

10.5. Incompatible materials

No further relevant information available.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

11. Toxicological information

11.1. Information on toxicological effects



11.1.1. Toxicokinetics, metabolism and distribution

No data available.

11.1.2. Acute toxicity

No data available.

11.1.3. Corrosive and irritation effects

No irritant effects.

11.1.4. Sensitizing effects

No data available.

11.1.5. Subacute and chronic toxicity

No data available.

11.1.6. Carcinogenicity, mutagenicity and reproduction toxicity

On carcinogenicity, mutagenicity and reproduction toxicity of the product no data are available.

11.1.7. Experience from practise

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

11.1.8. General remarks

When handled appropriate and used as intended, the product does not cause harmful effects according to our experience and current information.

12. Ecological information

12.1. Toxicity

No data available.



12.2. Persistence and degradability

Biological degradation	no data available
Abiotic degradation	no data available

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

Absorption/Desorption	no data available
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12.5. Volatility

No data available.

12.6. Water hazard class

1 (Self-assessment): slightly hazardous for water

12.7. Results of the PBT and vPvB assessment

On PBT or vPvB properties of the product or its ingredients according to the criteria of REACH Annex XIII no information is available.

12.8. Other adverse effects

Ozone depletion potential and global green-house effects are not known.

General remarks: When handled appropriate and used as intended, the product does not cause adverse effects according to our experience and current information, but should not be discharged into large quantities into an outflow or water body.

13. Disposal considerations

13.1. Waste treatment methods

13.1.1. Product

The allocation of a waste code number according to the European waste catalog should be done in consultation with the regional waste disposal company.



13.1.2. Packaging

Residues in packages should be removed, preferably by rinsing with water, and after complete emptying in accordance with the regulations for waste disposal.

14. Transport information

UN-Number	Not regulated
DOT, ADR, ADN, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not regulated
Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA	Not regulated
Class	Not regulated
Packing group	Not regulated
DOT, ADR, IMDG, IATA	Not regulated

15. Regulatory information

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

- Sara Section 355 (extremely hazardous substances): None of the ingredients is listed.
- Section 313 (Specific toxic chemical listings): None of the ingredients is listed.
- SCA (Toxic Substances Control Act):

56-81-5 glycerol

151-21-3 sodium deodecyl sulphate

7732-18-5 water Proposition 65

- Chemicals known to cause cancer: None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed.
- Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed.
- Chemicals known to cause development toxicity: None of the ingredients is listed.



15.2. Cancerogenity categories

EPA (Environmental Protection Agency)

TLV (Threshold Limit Value established by ACGIH)

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

None of the ingredients is listed.

None of the ingredients is listed.

15.3. Product related hazard information

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

This information is based on our present knowledge. Its objective is to describe the product from the point of view of safety, and no warranty is made other than its characteristics. This information does not absolve the user in any circumstances from observing other Legislative, Regulatory and Administrative requirements applying to the product, and to safety, hygiene and the well-being of the people in the workplace.



NIPPON GENETICS EUROPE GmbH

Mariaweilerstraße 28 a, 52349 Düren

Amtsgericht Düren HRB 4672,

Bank data UFJ bank Limited: Identification code: 30130700

Account number: 610762

Managing Director: Dr. Jürgen Lünzer, Tatsuji Hata, Kazuo Yamazaki

Value Tax ID: DE 239977252