



FastGene® 100 bp DNA Ladder PLUS

Cat. No.	Product	Content
MWD100P	FastGene® 100 bp DNA Ladder PLUS	0.5 mL

1. Identity of the substance and the manufacturer

1.1. Name of the substances or preparations

FastGene® 100 bp DNA Ladder PLUS

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 the Regulation (EC) No. 1272/2008 (CLP)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS) Classification to Regulation (EC) No 1272/2008.

2.2. Labelling elements

2.2.1. Labelling according to the Regulation (EC) No. 1272/2008 (CLP)



Symbol(s) : Void
Signal Word : Not dangerous

2.3. Other hazards

Hazards deriving from physical chemical properties: The data available do not support any physical or chemical hazard.

Human health hazards: Inappropriate handling may cause formation of aerosols. Inhalation of aerosols may cause allergic type reactions in sensitized individuals. Prolonged skin contact may cause minor irritation.

*Caution: Avoid inhalation, ingestion, and skin contacts.

Environmental hazards: The data available do not support any environmental hazard.

3. Composition/information about the components

3.1. Ingredients

Chemical	Concentration	EC No.	CAS No.	Classification
Glycerol	10-25%	200-289-5	56-81-5	not classified

3.2. Other components

Components not listed here are not dangerous or their concentrations do not exceed the limits specified in the EU directive 1272/2008 2008/EC.

3.3. Additional information

For the wording of the listed risk phrases refer to section 16.

4. First-aid measures

4.1. General information

No special measures required.



4.2. Description of necessary first-aid measures

4.2.1. Inhalation

If inhaled, remove victim from area of exposure. If symptoms of irritation or respiratory allergy occur, consult a doctor.

4.2.2. Skin contact

Generally, the product does not irritate the skin. If symptoms of irritation after prolonged exposure occur, consult a doctor.

4.2.3. Eye contact



Wash out opened eyes with plenty of water for several minutes. Consult a doctor in event of any complaints.

4.2.4. Ingestion

If swallowed, rinse mouth and throat thoroughly with water. Consult a doctor in event of any complaints.

5. In case of fire

5.1. Suitable extinguishing agents



Water spray, carbon dioxide (CO₂), dry chemical powder or appropriate foam.

5.2. Not suitable extinguishing agents

None.

5.3. Special exposure hazards from decomposition products



Not thoroughly investigated.



5.4. Advice for fire fighters

Wear self-contained breathing apparatus and protective clothing.

6. In case of spillage

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate gloves (see Section 8), safety glasses to clean small releases/spillage.
In case of vapor/aerosol formation, wear suitable respiratory protection means. Ventilate the area.

6.2. Environmental precautions

No special measures required.

6.3. Methods and materials for containment and cleanup

Absorb spillages with liquid-binding material. Ventilate and wash the area after the spillage is completely removed.

6.4. Additional information

No dangerous substances are released.

7. Handling and storage

7.1. Safe handling

7.1.1. Information on safe use

No further requirements. Use appropriate personal protection measures (see Section 8).
Avoid any contact with the liquid. Avoid the formation of aerosols. Ventilate area.

7.2. Safe storage

7.2.1. Technical measures and storage conditions

Store at - 20°C. No other specific requirements relating to the preparation.



8. Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limits

Chemical	CAS No.	Exposure limit type / source
Glycerol	56-81-5	TWA: 10 mg/m ³

8.2. Exposure controls

Engineering measures : No specific requirements relating to the preparation.

8.3 Personal protection

8.3.1. Respiratory protection



No respiratory protection is necessary.

8.3.2. Hand protection



Wear rubber gloves. No special requirements to rubber.

8.3.3. Eye protection



Safety glasses (goggles) are recommended during ordinary operations with the preparation.

8.3.4. Skin protection

The usual precautionary measures accepted in research laboratories, e.g. protective clothes (gowns). No specific requirements.



9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Green
Odour	Odourless
pH-value at 25 °C	8.0
Boiling point	100 °C
Flash Point	Not applicable
Flammability / autoflammability	The preparation is not flammable/self-igniting
Explosive properties	The preparation does not possess explosive properties
Oxidizing properties	Not applicable
Vapor pressure	Not applicable
Relative density at 20 °C	~1 g/cm ³
Solubility in/miscibility with water	Fully miscible
Fat solubility	Not applicable
Vapor density	Not applicable
Evaporation rate	Not applicable
Conductivity	Not applicable
Viscosity	Not viscous

9.2. Other information

No further relevant information available.

10. Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under storage conditions (see section 7).



10.3. Possibility of hazardous reactions

No dangerous reactions known.

10.4. Conditions to avoid

No conditions which may cause dangerous reactions.

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

11. Toxicological information

11.1. Information on toxicological effects

11.1.1. Acute toxicity

Not hazardous.

11.1.2. Inhalation

Inhalation of aerosols may cause allergic type reactions in sensitized individuals.

11.1.3. Ingestion

Repeated ingestion or excessive dosage may cause irritation of the gastrointestinal tract.

11.1.4. Skin and eye contact

Generally, the product does not irritate the skin and eyes. Prolonged skin or eye contact may cause minor irritation.

Chemical	LD50 Oral	LD50 Dermal
Glycerol	12600 mg/kg (Rat)	21900 mg/kg (Rat)



11.1.5. Chronic toxicity

Product does not present a chronic toxicity hazard based on known or supplied information.

11.1.6. Carcinogenic effects

Product does not present a carcinogenic effects based on known or supplied information.

11.1.7. Mutagenic effects

Product does not present a c mutagenic effects based on known or supplied information.

11.1.8. Reproductive toxicity

Product does not present a reproductive toxicity hazard based on known or supplied information.

11.1.9. Sensitization

Product does not present a sensitization hazard based on known or supplied information.

11.1.10. Target organ effects

Product does not present a target organ effects based on known or supplied information.

12. Ecological information

12.1. Toxicity

The preparation is considered not dangerous to the environment with respect to mobility, persistence and degradability, bioaccumulation, aquatic toxicity and other data relating to ecotoxicity.

12.2. Persistence and degradability

The preparation is readily biodegradable.

12.3. Bioaccumulative potential

It is considered that the preparation does not accumulate in biota, and does not pass through the food chain.



12.4. Other adverse effects

Not applicable.

13. Disposal considerations

13.1. Waste treatment methods

13.1.1. Waste from residues / unused products

Dispose of in accordance with local regulation.

13.1.2. Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

14.1. IMDG/IMO

Non hazardous for sea freight.

14.2. RID

Non hazardous for rail transport.

14.3. ARD

Non hazardous for road transport.

14.4. ICAO/IATA

Non hazardous for air transport.



15. Regulatory information

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

No information available.

15.2. Chemical safety assessment

No information available.

15.3. Regulatory information

15.3.1. US

- **Labelling according to US Regulations:**
Caution: Avoid contact and inhalation.
- **US Regulatory information:**
SARA LISTED: No.

15.3.2. EU

- **Labelling according to EU Guidelines:**
The preparation is not dangerous within the meaning of Directives 1272/2008/EC, and is not labelled with danger symbols or indications of danger.

15.3.3. Canada

- **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.

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