



FastGene® 100 bp DNA Marker

Cat. No.	Product	Content
MWD100	FastGene® 100 bp DNA Marker	0.5 mL

1. Identity of the substance and the manufacturer

1.1. Name of the substances or preparations

FastGene® 100 bp DNA 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 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)



Pictograms	none
Signal word	none
H statements	none
P statements	none

2.3. Other hazards

The data available do not support any physical or chemical hazard.

3. Composition/information about the components

3.1. Substances

Not relevant.

3.2. Mixtures

3.2.1. Chemical characterization

Aqueous solution.

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

4. First-aid measures

4.1. General information



If complains persist consult a physician. Remove contaminated cloths and shoes, thoroughly clean before re-use. If complains and symptoms occur seek medical advice.

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

At contact with the skin immediately wash with much water. If complains and symptoms occur seek medical advice.

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

Decontamination, symptomatic treatment. No specific antidote known.

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

None.



5.3. Special hazards arising from the substance or mixture



Not thoroughly investigated.

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 skin, eyes and cloth, wear suitable protection equipment. Ensure adequate ventilation. Avoid aerosol formation.

6.2. Environmental precautions

No special measures required.

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

Refer to section 8 – personal protection and section 13 – information on disposal.

7. Handling and storage

7.1. Safe handling

7.1.1. Information on safe use

Avoid inhalation of aerosol, contact with eyes, skin and cloth, as well as longer or repeated



exposure. Provide sufficient ventilation of the working room (local exhaust ventilation if needful). If workplace exposure limits are exceeded, wear appropriate respiratory protection.

7.1.2. Information on fire and explosion protection

No special measures needful.

7.1.3. Handling rules

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

Storage at -20°C.

7.2.2. Further information to the storage conditions

None.

7.2. Specific end uses

None.

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

8.1.2. Biological exposure limits

Not available.



8.1.2. DNEL and PNEC values

Not available.

Reference: For the assessment of the own risk assessment measures (**RMM**) with the charge-free tool **ECETOC TRAM** or with another method possibly a scaling for the proof of the safe use should be performed. Existing DNEL/PNEC values also may be extrapolated based at the concentrations from section 3. If an exposure scenario should be completely applicable, this shall be documented.

Remark: With data given by an extended SDB, this is to be done within one year after receipt of the eSDB.

8.2. Exposure controls

8.2.1. Personal protection

8.2.1.1. Respiratory protection



No respiratory protection is necessary.

8.2.1.2. Hand protection



At the risk of skin contact with the product, ensure adequate protection by wearing suitable protective gloves.

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.



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	Green
Odour	Odourless
Odour threshold	Not determined

Parameter	Value	Unit	Method	Remarks
pH value at 20 °C	8	-	visual by pH paper	
Melting poin/range	approx. 0	°C	-	32 °F
Boiling point/range	approx. 100	°C	-	212 °F
Flash point	n.a.	°C	-	
Self-ignition temperature	n.b.	°C	-	
Vapour pressure at 20 °C	n.a.	mmHg	-	water
Density	n.d.	g/cm ³		



Bulk density	n.d.	g/m ³	-	
Vapor density (air = 1)	n.d.	g/m ³	-	water
Water solubility at 20 °C	Fully miscible	mg/L	-	unlimited
Granulometry	n.a.	µm	-	
Partition coefficient: noctanol/water log Kow	n.d.	-	-	
Dynamic viscosity	n.d.	mPa*s	-	
Explosion limit	lower	n.a.	Vol. %	
	upper	n.a.	Vol. %	

*n.a.: not applicable**n.d.: not determined*

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

None.

10.5. Incompatible materials

None.

10.6. Hazardous decomposition products

None.



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

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

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

No data available.

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

Product is readily biodegradable.

Abiotic degradation

no data available

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. Mobility in soil

Absorption/Desorption

no data available

12.5. Volatility

No data available.

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. Recommendation:

AVV waste code number	16 05 09	discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08
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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. Packaging



which is not completely emptied must be disposed of in the form as determined by the regional waste disposal company. Recommendation:

AVV waste code number | 15 01 06 | mixed packaging

14. Transport information

UN-Number	3265
UN proper shipping name	
Transport hazard class(es): Hazard label	
Packaging group Hazard number	
Environmental hazards Marine Pollutant	
Special precautions for user	refer to section 9
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	not relevant
Transport category	1
Tunnel code	

15. Regulatory information

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

15.1.1. EU Regulations

Classification and labelling acc. to Regulation (EC) No. 1272/2008 (CLP): the product is not subject to classification and labelling as it is considered not dangerous.

Authorizations and/or use restrictions: not applicable.

Information on Directive 1999/13/EG on VOC emission limitations

15.2. Cancerogenity categories

Chemical safety assessments (CSA) according to the Article 14 Paragraph 1 of the Regulation



(EC) No 1907/2006 (REACH) are not available.

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

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