

SAFETY DATA SHEET



Genomic DNA Reagents, Part Number 5067-5366

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Genomic DNA Reagents, Part Number 5067-5366
Part No. (Kit) : 5067-5366
Part No. : Genomic DNA Ladder 5190-6292
Genomic DNA Sample 5190-6293
Buffer

1.2 Relevant identified uses of the substance or mixture and uses advised against

| Identified uses | |
|---------------------------|--------------|
| Analytical reagent. | |
| Research and Development | |
| Genomic DNA Ladder | 1 x 0.025 ml |
| Genomic DNA Sample Buffer | 1 x 1.350 ml |

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Genomic DNA Ladder Mixture
Genomic DNA Sample Mixture
Buffer

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Ingredients of unknown toxicity : Genomic DNA Ladder Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : Genomic DNA Ladder No signal word.
Genomic DNA Sample No signal word.
Buffer

Date of issue/Date of revision : 24/10/2017

Genomic DNA Reagents, Part Number 5067-5366

SECTION 2: Hazards identification

Hazard statements : Genomic DNA Ladder No known significant effects or critical hazards.
 Genomic DNA Sample No known significant effects or critical hazards.
 Buffer

Precautionary statements

Prevention : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Response : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Storage : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Disposal : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Supplemental label elements : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

Special packaging requirements

Tactile warning of danger : Genomic DNA Ladder Not applicable.
 Genomic DNA Sample Not applicable.
 Buffer

2.3 Other hazards

Other hazards which do not result in classification : Genomic DNA Ladder None known.
 Genomic DNA Sample None known.
 Buffer

SECTION 3: Composition/information on ingredients

3.1 Substances : Genomic DNA Ladder Mixture
 Genomic DNA Sample Buffer Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|-------------------------------|--|-----|--|------|
| Genomic DNA Ladder Sucrose | REACH #: Annex IV EC: 200-334-9 CAS: 57-50-1 | ≤10 | Not classified. See Section 16 for the full text of the H statements declared above. | [2] |

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Date of issue/Date of revision : 24/10/2017

SECTION 4: First aid measures

4.1 Description of first aid measures

| | | |
|-----------------------------------|---------------------------|---|
| Eye contact | : Genomic DNA Ladder | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| | Genomic DNA Sample Buffer | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| Inhalation | : Genomic DNA Ladder | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| | Genomic DNA Sample Buffer | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | : Genomic DNA Ladder | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | Genomic DNA Sample Buffer | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : Genomic DNA Ladder | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| | Genomic DNA Sample Buffer | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| Protection of first-aiders | : Genomic DNA Ladder | No action shall be taken involving any personal risk or without suitable training. |
| | Genomic DNA Sample Buffer | No action shall be taken involving any personal risk or without suitable training. |

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

| | | |
|---------------------|---------------------------|---|
| Eye contact | : Genomic DNA Ladder | No known significant effects or critical hazards. |
| | Genomic DNA Sample Buffer | No known significant effects or critical hazards. |
| Inhalation | : Genomic DNA Ladder | No known significant effects or critical hazards. |
| | Genomic DNA Sample Buffer | No known significant effects or critical hazards. |
| Skin contact | : Genomic DNA Ladder | No known significant effects or critical hazards. |
| | Genomic DNA Sample Buffer | No known significant effects or critical hazards. |
| Ingestion | : Genomic DNA Ladder | No known significant effects or critical hazards. |
| | Genomic DNA Sample Buffer | No known significant effects or critical hazards. |

Over-exposure signs/symptoms

| | | |
|--------------------|---------------------------|-------------------|
| Eye contact | : Genomic DNA Ladder | No specific data. |
| | Genomic DNA Sample Buffer | No specific data. |
| Inhalation | : Genomic DNA Ladder | No specific data. |
| | Genomic DNA Sample Buffer | No specific data. |

Genomic DNA Reagents, Part Number 5067-5366

SECTION 4: First aid measures

| | | | |
|---------------------|---|--------------------|-------------------|
| Skin contact | : | Genomic DNA Ladder | No specific data. |
| | | Genomic DNA Sample | No specific data. |
| | | Buffer | |
| Ingestion | : | Genomic DNA Ladder | No specific data. |
| | | Genomic DNA Sample | No specific data. |
| | | Buffer | |

4.3 Indication of any immediate medical attention and special treatment needed

| | | | |
|----------------------------|---|------------------------------|---|
| Notes to physician | : | Genomic DNA Ladder | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | | Genomic DNA Sample Buffer | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : | Genomic DNA Ladder | No specific treatment. |
| | | Genomic DNA Sample Buffer | No specific treatment. |

SECTION 5: Firefighting measures

5.1 Extinguishing media

| | | | |
|---------------------------------------|---|------------------------------|---|
| Suitable extinguishing media | : | Genomic DNA Ladder | Use an extinguishing agent suitable for the surrounding fire. |
| | | Genomic DNA Sample Buffer | Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : | Genomic DNA Ladder | None known. |
| | | Genomic DNA Sample Buffer | None known. |

5.2 Special hazards arising from the substance or mixture

| | | | |
|--|---|------------------------------|---|
| Hazards from the substance or mixture | : | Genomic DNA Ladder | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | | Genomic DNA Sample Buffer | In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous combustion products | : | Genomic DNA Ladder | Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides |
| | | Genomic DNA Sample Buffer | No specific data. |

5.3 Advice for firefighters

| | | | |
|---|---|------------------------------|---|
| Special precautions for fire-fighters | : | Genomic DNA Ladder | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| | | Genomic DNA Sample Buffer | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | : | Genomic DNA Ladder | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |
| | | Genomic DNA Sample Buffer | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

| | | |
|------------------------------------|---------------------------|---|
| For non-emergency personnel | : Genomic DNA Ladder | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| | Genomic DNA Sample Buffer | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| For emergency responders | : Genomic DNA Ladder | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| | Genomic DNA Sample Buffer | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

6.2 Environmental precautions

| | |
|---------------------------|---|
| : Genomic DNA Ladder | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Genomic DNA Sample Buffer | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |

6.3 Methods and material for containment and cleaning up

| | | |
|--------------------------------|---------------------------|---|
| Methods for cleaning up | : Genomic DNA Ladder | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | Genomic DNA Sample Buffer | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |

6.4 Reference to other sections

| |
|---|
| : See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information. |
|---|

SECTION 7: Handling and storage

7.1 Precautions for safe handling

| | | |
|---|---------------------------|---|
| Protective measures | : Genomic DNA Ladder | Put on appropriate personal protective equipment (see Section 8). |
| | Genomic DNA Sample Buffer | Put on appropriate personal protective equipment (see Section 8). |
| Advice on general occupational hygiene | : Genomic DNA Ladder | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| | Genomic DNA Sample Buffer | Eating, drinking and smoking should be prohibited in areas |

Genomic DNA Reagents, Part Number 5067-5366

SECTION 7: Handling and storage

Buffer

where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

: Genomic DNA Ladder

Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Genomic DNA Sample Buffer

Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations

: Genomic DNA Ladder
Genomic DNA Sample Buffer

Industrial applications, Professional applications.
Industrial applications, Professional applications.

Industrial sector specific solutions

: Genomic DNA Ladder
Genomic DNA Sample Buffer

Not applicable.
Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------------|---|
| Genomic DNA Ladder Sucrose | EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 20 mg/m ³ 15 minutes. TWA: 10 mg/m ³ 8 hours. |

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for

SECTION 8: Exposure controls/personal protection

methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | | |
|------------------------|----------------------|----------------|
| Physical state | : Genomic DNA Ladder | Liquid. |
| | Genomic DNA Sample | Liquid. |
| | Buffer | |
| Colour | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Odour | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Odour threshold | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |

SECTION 9: Physical and chemical properties

| | | |
|---|----------------------|--|
| pH | : Genomic DNA Ladder | 8 |
| | Genomic DNA Sample | 8 |
| | Buffer | |
| Melting point/freezing point | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Initial boiling point and boiling range | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Flash point | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Evaporation rate | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Flammability (solid, gas) | : Genomic DNA Ladder | Not applicable. |
| | Genomic DNA Sample | Not applicable. |
| | Buffer | |
| Upper/lower flammability or explosive limits | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Vapour pressure | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Vapour density | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Relative density | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Solubility(ies) | : Genomic DNA Ladder | Easily soluble in the following materials: cold water and hot water. |
| | Genomic DNA Sample | Easily soluble in the following materials: cold water and hot water. |
| | Buffer | |
| Partition coefficient: n-octanol/water | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Auto-ignition temperature | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Decomposition temperature | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Viscosity | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Explosive properties | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |
| Oxidising properties | : Genomic DNA Ladder | Not available. |
| | Genomic DNA Sample | Not available. |
| | Buffer | |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | | |
|--|---|--|
| 10.1 Reactivity | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : Genomic DNA Ladder Genomic DNA Sample Buffer | The product is stable. The product is stable. |
| 10.3 Possibility of hazardous reactions | : Genomic DNA Ladder Genomic DNA Sample Buffer | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific data. No specific data. |
| 10.5 Incompatible materials | : Genomic DNA Ladder Genomic DNA Sample Buffer | May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. |
| 10.6 Hazardous decomposition products | : Genomic DNA Ladder Genomic DNA Sample Buffer | Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

: Genomic DNA Ladder
Genomic DNA Sample Buffer
Not available.
Not available.

Potential acute health effects

Inhalation : Genomic DNA Ladder
Genomic DNA Sample Buffer
No known significant effects or critical hazards.
No known significant effects or critical hazards.

SECTION 11: Toxicological information

| | | |
|---------------------|--|--|
| Ingestion | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Skin contact | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Eye contact | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | | |
|---------------------|--|--|
| Inhalation | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific data. No specific data. |
| Ingestion | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific data. No specific data. |
| Skin contact | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific data. No specific data. |
| Eye contact | : Genomic DNA Ladder Genomic DNA Sample Buffer | No specific data. No specific data. |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

| | | |
|------------------------------|--|--|
| General | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Carcinogenicity | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Mutagenicity | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Teratogenicity | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Developmental effects | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Fertility effects | : Genomic DNA Ladder Genomic DNA Sample Buffer | No known significant effects or critical hazards. No known significant effects or critical hazards. |

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Genomic DNA Ladder Not applicable.
Genomic DNA Sample Buffer Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--------------------------|--|
| Australia | : Not determined. |
| Canada | : Not determined. |
| China | : All components are listed or exempted. |
| Europe | : Not determined. |
| Japan | : Japan inventory (ENCS) : Not determined. Japan inventory (ISHL) : Not determined. |
| Malaysia | : Not determined. |
| New Zealand | : Not determined. |
| Philippines | : Not determined. |
| Republic of Korea | : Not determined. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : Not determined. |
| Turkey | : Not determined. |
| United States | : Not determined. |

Genomic DNA Reagents, Part Number 5067-5366

SECTION 15: Regulatory information

Viet Nam : Not determined.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|-----------------|---------------|
| Not classified. | |

Full text of abbreviated H statements

Not applicable.

Full text of classifications [CLP/GHS]

Not applicable.

Date of issue/ Date of revision : 24/10/2017

Date of previous issue : No previous validation.

Version : 1

Notice to reader

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.