SAFETY DATA SHEET



Agilent DNA 1000 Kit, Part Number 5067-1504

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

1.1 Product identifier

Product name : Agilent DNA 1000 Kit, Part Number 5067-1504

: 5067-1504 Part no. (chemical kit)

Part no. Reagents DNA 1000 G2938-80020

DNA 1000 Gel Matrix Not available. **DNA Dye Concentrate** Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available.

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

Material uses : Analytical reagent.

Research and Development

DNA 1000 Gel Matrix 3 x 0.5 ml **DNA Dye Concentrate** 1 x 0.09 ml DNA 1000 Marker 2 x 1.2 ml DNA 1000 Ladder 1 x 0.035 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 : pdl-msds_author@agilent.com

responsible for this SDS

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 : DNA 1000 Gel Matrix Mixture

DNA Dye Concentrate Mixture DNA 1000 Marker Mixture DNA 1000 Ladder Mixture

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

Not classified.

Ingredients of unknown : DNA 1000 Gel Matrix Percentage of the mixture consisting of ingredient(s) of

toxicity

unknown acute dermal toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of

unknown acute inhalation toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of

unknown acute oral toxicity: 1 - 10%

DNA 1000 Marker Percentage of the mixture consisting of ingredient(s) of

unknown acute dermal toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of

unknown acute inhalation toxicity: 1 - 10%

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version: 3 1/18

SECTION 2: Hazards identification

Percentage of the mixture consisting of ingredient(s) of

unknown acute oral toxicity: 1 - 10%

Ingredients of unknown

ecotoxicity

: DNA 1000 Gel Matrix

DNA 1000 Marker

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4.4% Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 4.6%

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	: DNA 1000 Gel Matrix	No signal word.	
_	DNA Dye Concentrate	No signal word.	
	DNA 1000 Marker	No signal word	

DNA 1000 Marker No signal word.

DNA 1000 Ladder No signal word.

No signal word.

Hazard statements: DNA 1000 Gel Matrix No known significant effects or critical hazards.

DNA Dye Concentrate

DNA 1000 Marker

DNA 1000 Ladder

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Precautionary statements

Prevention : DNA 1000 Gel Matrix Not applicable.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

Not applicable.
Not applicable.

Response : DNA 1000 Gel Matrix Not applicable.
DNA Dye Concentrate Not applicable.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix

Not applicable.
Not applicable.
Not applicable.

Storage : DNA 1000 Gel Matrix Not applicable.
DNA Dye Concentrate Not applicable.
DNA 1000 Marker Not applicable.
DNA 1000 Ladder Not applicable.
Disposal : DNA 1000 Gel Matrix Not applicable.

: DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

Not applicable.
Not applicable.
Not applicable.

Supplemental label : DNA 1000 Gel Matrix Not applicable.

PNA Dye Concentrate Not applicable.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder
DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA Dye Concentrate
Not applicable.
Not applicable.
Not applicable.
Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : DNA 1000 Gel Mar DNA 1000 Marker DNA 1000 Ladder

Special packaging requirements

Tactile warning of
danger: DNA 1000 Gel Matrix
DNA Dye ConcentrateNot applicable.
Not applicable.

DNA 1000 Marker Not applicable.
DNA 1000 Ladder Not applicable.

2.3 Other hazards

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 2/18

Not applicable.

Not applicable.

SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: NA 1000 Gel Matrix This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

assessed to be a PBT or a vPvB.

DNA 1000 Marker This mixture does not contain any substances that are

assessed to be a PBT or a vPvB.

DNA 1000 Ladder This mixture does not contain any substances that are

assessed to be a PBT or a vPvB.

Other hazards which do

not result in classification

DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker None known. None known. None known. None known.

SECTION 3: Composition/information on ingredients

DNA 1000 Ladder

3.1 Substances : DNA 1000 Gel Matrix Mixture

DNA Dye Concentrate Mixture
DNA 1000 Marker Mixture
DNA 1000 Ladder Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact: DNA 1000 Gel Matrix 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.

DNA Dye Concentrate

Immediately flush eyes with plenty of water, occasionally

DIVA Dye Concentrate

lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

DNA 1000 Marker

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.

DNA 1000 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.

Inhalation : DNA 1000 Gel Matrix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition

products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

DNA Dye Concentrate Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Get medical attention if

symptoms occur.

DNA 1000 Marker Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for

48 hours.

DNA 1000 Ladder Remove victim to fresh air and keep at rest in a position

comfortable for breathing. Get medical attention if

symptoms occur.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 3/18

SECTION 4: First aid measures

Skin contact : DNA 1000 Gel Matrix Flush contaminated skin with plenty of water. Remove

contaminated clothing and shoes. Get medical attention if

symptoms occur.

DNA Dye Concentrate Flush contaminated skin with plenty of water. Remove

contaminated clothing and shoes. Get medical attention if

symptoms occur.

DNA 1000 Marker Flush contaminated skin with plenty of water. Remove

contaminated clothing and shoes. Get medical attention if

symptoms occur.

DNA 1000 Ladder Flush contaminated skin with plenty of water. Remove

contaminated clothing and shoes. Get medical attention if

symptoms occur.

Ingestion : DNA 1000 Gel Matrix 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.

DNA Dye Concentrate 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.

DNA 1000 Marker 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.

DNA 1000 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.

Protection of first-aiders : DNA 1000 Gel Matrix No action shall be taken involving any personal risk or

without suitable training.

DNA Dye Concentrate

No action shall be taken involving any personal risk or

without suitable training.

DNA 1000 Marker No action shall be taken involving any personal risk or

without suitable training.

DNA 1000 Ladder 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 : DNA 1000 Gel Matrix No known significant effects or critical hazards.
DNA Dye Concentrate No known significant effects or critical hazards.

DNA 1000 Marker

DNA 1000 Ladder

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Inhalation : DNA 1000 Gel Matrix No known significant effects or critical hazards.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact : DNA 1000 Gel Matrix No known significant effects or critical hazards. No known significant effects or critical hazards.

DNA 1000 Marker

DNA 1000 Ladder

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 4/18

SECTION 4: First aid measures

Ingestion : DNA 1000 Gel Matrix No known significant effects or critical hazards.

DNA Dye Concentrate No known significant effects or critical hazards.

DNA 1000 Marker No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : DNA 1000 Gel Matrix No specific data. **DNA Dye Concentrate** No specific data. DNA 1000 Marker No specific data. DNA 1000 Ladder No specific data. **Inhalation** DNA 1000 Gel Matrix No specific data. **DNA Dye Concentrate** No specific data. DNA 1000 Marker No specific data. DNA 1000 Ladder No specific data. **Skin contact** : DNA 1000 Gel Matrix No specific data. **DNA Dye Concentrate** No specific data.

DNA 1000 Marker

DNA 1000 Ladder

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : DNA 1000 Gel Matrix In case of inhalation of decomposition products in a fire,

symptoms may be delayed. The exposed person may need

to be kept under medical surveillance for 48 hours.

DNA Dye Concentrate to be kept under medical surveillance for 48 hours.

Treat symptomatically. Contact poison treatment specialist

No specific data.

immediately if large quantities have been ingested or inhaled.

DNA 1000 Marker In case of inhalation of decomposition products in a fire,

symptoms may be delayed. The exposed person may need

to be kept under medical surveillance for 48 hours.

DNA 1000 Ladder Treat symptomatically. Contact poison treatment specialist

immediately if large quantities have been ingested or inhaled.

Specific treatments : DNA 1000 Gel Matrix No specific treatment.

DNA Dye Concentrate No specific treatment.
DNA 1000 Marker No specific treatment.
DNA 1000 Ladder No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Ingestion

Suitable extinguishing : DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Market

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

Use an extinguishing agent suitable for the surrounding fire.
Use an extinguishing agent suitable for the surrounding fire.
Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

None known.
None known.
None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the : DNA 1000 Gel I substance or mixture

: DNA 1000 Gel Matrix In a fire or if heated, a pressure increase will occur and the

container may burst.

DNA Dye Concentrate In a fire or if heated, a pressure increase will occur and the

container may burst.

DNA 1000 Marker In a fire or if heated, a pressure increase will occur and the

container may burst.

DNA 1000 Ladder In a fire or if heated, a pressure increase will occur and the

container may burst.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 5/18

SECTION 5: Firefighting measures

Hazardous combustion products

: DNA 1000 Gel Matrix

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides

DNA Dye Concentrate

Decomposition products may include the following materials:

carbon dioxide carbon monoxide sulfur oxides

DNA 1000 Marker Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides No specific data.

DNA 1000 Ladder

5.3 Advice for firefighters

Special precautions for fire-fighters

: DNA 1000 Gel Matrix

DNA Dye Concentrate

DNA 1000 Marker

DNA 1000 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. 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. 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.

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 firefighters

: DNA 1000 Gel Matrix

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.

DNA Dye Concentrate 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.

DNA 1000 Marker 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.

DNA 1000 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.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version: 3 6/18

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: DNA 1000 Gel Matrix

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.

DNA Dye Concentrate 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.

DNA 1000 Marker 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.

DNA 1000 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.

For emergency responders

: DNA 1000 Gel Matrix

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".

DNA Dye Concentrate If specialised clothing is

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".

DNA 1000 Marker 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".

DNA 1000 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".

6.2 Environmental precautions

: DNA 1000 Gel Matrix

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).

DNA Dye Concentrate 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).

DNA 1000 Marker 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).

DNA 1000 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).

6.3 Methods and material for containment and cleaning up

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 7/18

SECTION 6: Accidental release measures

Methods for cleaning up: DNA 1000 Gel Matrix 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.

DNA Dye Concentrate 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.

DNA 1000 Marker 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.

DNA 1000 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.

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 : DNA 1000 Gel Matrix Put on appropriate personal protective equipment (see

Section 8).

DNA Dye Concentrate Put on appropriate personal protective equipment (see

Section 8).

DNA 1000 Marker Put on appropriate personal protective equipment (see

Section 8).

DNA 1000 Ladder Put on appropriate personal protective equipment (see

Section 8).

Advice on general occupational hygiene

: DNA 1000 Gel Matrix 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 a

drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

DNA Dye Concentrate 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.

DNA 1000 Marker 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.

DNA 1000 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.

7.2 Conditions for safe storage, including any incompatibilities

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 8/18

SECTION 7: Handling and storage

Storage

: DNA 1000 Gel Matrix

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.

DNA Dye Concentrate

Storage temperature: 4°C (39.2°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. Storage temperature: 4°C (39.2°F). Store in accordance with local regulations. Store in original container protected

DNA 1000 Marker

Section 10 for incompatible materials before handling or use. Storage temperature: 4°C (39.2°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. Store in accordance with local regulations. Store in original

DNA 1000 Ladder

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.

container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see

7.3 Specific end use(s)

Recommendations : DNA 1000 Gel Matrix

DNA Dye Concentrate Industria
DNA 1000 Marker Industria
DNA 1000 Ladder Industria

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

Industrial sector specific

solutions

: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder

Not applicable. Not applicable. Not applicable. Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 9/18

SECTION 8: Exposure controls/personal protection

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 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 sideshields.

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.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 10/18

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

_					
Aρ	n	\sim	ro	n	\sim
AD	u	ca	ı a	ш	しせ

Odour

Odour threshold

Physical state : DNA 1000 Gel Matrix Liquid.

DNA Dye Concentrate Liquid.
DNA 1000 Marker Liquid.
DNA 1000 Ladder Liquid.

Colour : DNA 1000 Gel Matrix Not available.

DNA Dye Concentrate Blue.

DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker

Not available.
Not available.
Not available.
Not available.

DNA 1000 Marker
DNA 1000 Ladder
Not available.
DNA 1000 Gel Matrix
Not available.

DNA Dye Concentrate Not available.
DNA 1000 Marker Not available.
DNA 1000 Ladder Not available.

pH : DNA 1000 Gel Matrix 8

DNA Dye Concentrate Not available.

DNA 1000 Marker 8

Melting point/freezing point : DNA 1000 Ladder Not available.

DNA 1000 Gel Matrix Not available.

DNA 1000 Concentrate 18.5°C

DNA 1000 Marker 0°C
DNA 1000 Ladder 0°C

Initial boiling point and : DNA 1000 Gel Matrix Not available.

boiling range DNA Dye Concentrate 189°C

DNA Dye Concentrate 189°C DNA 1000 Marker 100°C DNA 1000 Ladder 100°C

Flash point : DNA 1000 Gel Matrix Not available.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder
DNA 1000 Gel Matrix
Not available.
Not available.

Evaporation rate : DNA 1000 Gel Matrix Not available. DNA Dye Concentrate Not available.

DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix

Not available.

Not applicable.

Flammability (solid, gas) : DNA 1000 Gel Matrix Not applicable.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

Not applicable.
Not applicable.

Upper/lower flammability or
explosive limits: DNA 1000 Gel Matrix
DNA Dye ConcentrateNot available.
Lower: 2.6%

DNA 1000 Marker Not available.

DNA 1000 Ladder Not available.

Vapour pressure : DNA 1000 Gel Matrix Not available.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix

Not available.

Not available.

Vapour density: DNA 1000 Gel Matrix Not available.

DNA Dye Concentrate: 2.7 [Air = 1]

DNA 1000 Marker Not available.

DNA 1000 Ladder Not available.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 11/18

SECTION 9: Physical and chemical properties

Relative density DNA Dye Concentrate Not available. DNA 1000 Marker Not available.

: DNA 1000 Gel Matrix

DNA 1000 Ladder Not available.

Solubility(ies) : DNA 1000 Gel Matrix Easily soluble in the following materials: cold water and

Not available.

DNA Dye Concentrate Easily soluble in the following materials: cold water and

hot water.

DNA 1000 Marker Easily soluble in the following materials: cold water and

hot water.

DNA 1000 Ladder Easily soluble in the following materials: cold water and

hot water.

Partition coefficient: n-

Auto-ignition temperature

Decomposition temperature

octanol/water

Viscosity

: DNA 1000 Gel Matrix Not available. **DNA Dye Concentrate** Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available. DNA 1000 Gel Matrix

Not available. **DNA Dve Concentrate** Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available. : DNA 1000 Gel Matrix Not available.

DNA Dye Concentrate Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available. : DNA 1000 Gel Matrix Not available. **DNA Dye Concentrate** Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available.

Not available. DNA 1000 Gel Matrix **DNA Dye Concentrate** Not available. DNA 1000 Marker Not available. DNA 1000 Ladder Not available. : DNA 1000 Gel Matrix Not available. **DNA Dye Concentrate** Not available.

DNA 1000 Marker Not available. DNA 1000 Ladder Not available.

9.2 Other information

Explosive properties

Oxidising properties

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity : DNA 1000 Gel Matrix No specific test data related to reactivity available for this

product or its ingredients.

No specific test data related to reactivity available for this **DNA Dye Concentrate**

product or its ingredients.

DNA 1000 Marker No specific test data related to reactivity available for this

product or its ingredients.

DNA 1000 Ladder No specific test data related to reactivity available for this

product or its ingredients.

10.2 Chemical stability : DNA 1000 Gel Matrix

The product is stable. **DNA Dye Concentrate** The product is stable. DNA 1000 Marker The product is stable. DNA 1000 Ladder The product is stable.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version: 3 12/18

SECTION 10: Stability and reactivity

10.3 Possibility of hazardous reactions

: DNA 1000 Gel Matrix

Under normal conditions of storage and use, hazardous

reactions will not occur.

DNA Dye Concentrate

Under normal conditions of storage and use, hazardous

reactions will not occur.

DNA 1000 Marker

Under normal conditions of storage and use, hazardous

reactions will not occur.

DNA 1000 Ladder

Under normal conditions of storage and use, hazardous

reactions will not occur.

10.4 Conditions to avoid

: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder No specific data. No specific data. No specific data. No specific data.

10.5 Incompatible

materials

: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder

May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products

: DNA 1000 Gel Matrix

DNA Dye Concentrate

DNA 1000 Marker

DNA 1000 Ladder

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.

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

N/A

Irritation/Corrosion

Conclusion/Summary

: Not available.

Sensitiser

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary

: Not available.

Reproductive toxicity

Conclusion/Summary

: Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 13/18

SECTION 11: Toxicological information

Information on likely routes of exposure

Ingestion

Eye contact

Ingestion

Skin contact

Eye contact

: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder Not available.

Routes of entry anticipated: Oral, Dermal, Inhalation.

Not available. Not available.

Potential acute health effects

Inhalation : D

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder
DNA 1000 Gel Matrix
 DNA 1000 Gel Matrix
No known significant effects or critical hazards.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact : DNA 1000 Gel Matrix No known significant effects or critical hazards.

DNA Dye Concentrate No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

DNA 1000 Ladder

No known significant effects or critical hazards.

DNA 1000 Marker

No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : DNA 1000 Gel Matrix No specific data.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA Dye Concentrate
No specific data.
No specific data.
No specific data.

DNA 1000 Marker
DNA 1000 Ladder

DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

No specific data.

: DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

No specific data.
No specific data.
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 : DNA 1000 Gel Matrix No known significant effects or critical hazards.

DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 14/18

SECTION 11: Toxicological information

	•	
Carcinogenicity	: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder	No known significant effects or critical hazards.
Teratogenicity	: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder	No known significant effects or critical hazards.
Developmental effects	: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder	No known significant effects or critical hazards.
Fertility effects	: DNA 1000 Gel Matrix DNA Dye Concentrate DNA 1000 Marker DNA 1000 Ladder	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

: Not available.

coefficient (Koc)

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

: 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

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 15/18

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - United Kingdom (UK)

Agilent DNA 1000 Kit, Part Number 5067-1504

SECTION 13: Disposal considerations

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
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

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 : DNA 1000 Gel Matrix
DNA Dye Concentrate
DNA 1000 Marker
DNA 1000 Ladder

Not applicable.
Not applicable.
Not applicable.

Other EU regulations

Industrial emissions : Listed (integrated pollution prevention and control) -

Air

Ozone depleting substances (1005/2009/EU)

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 16/18

SECTION 15: Regulatory information

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 : Not determined.
Europe : Not determined.

Japan : Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

New Zealand : Not determined. **Philippines** Not determined. Republic of Korea : Not determined. **Taiwan** : Not determined. **Thailand** Not determined. **Turkey** : Not determined. **United States** : Not determined. **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]

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

vPvB = Very Persistent and Very Bioaccumulative

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

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 17/18

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2015/830 - United Kingdom (UK)

Agilent DNA 1000 Kit, Part Number 5067-1504

SECTION 16: Other information

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

: 30/10/2019

revision

Date of previous issue : 05/09/2017

Version : 3

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.

Date of issue/Date of revision : 30/10/2019 Date of previous issue : 05/09/2017 Version : 3 18/18