# SAFETY DATA SHEET



PathDetect p53-Luc Plasmid, Part Number 219085

#### SECTION 1: Identification of the substance/mixture and of the company/ undertaking **1.1 Product identifier Product name** : PathDetect p53-Luc Plasmid, Part Number 219085 Part no. : 219085 1.2 Relevant identified uses of the substance or mixture and uses advised against **Identified uses** : Analytical reagent. p53-Luc Plasmid 0.05 ml 219085-51 **Uses advised against** : None known. 1.3 Details of the supplier of the safety data sheet Agilent Technologies LDA UK Ltd. 5500 Lakeside Cheadle Royal Business Park, Cheadle, Cheshire, SK8 3GR United Kingdom Tel: +44 (0) 345 712 5292 e-mail address of person : pdl-msds\_author@agilent.com responsible for this SDS 1.4 Emergency telephone number

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

### **SECTION 2: Hazards identification**

 2.1 Classification of the substance or mixture

 Product definition
 : Mixture

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

 Not classified.

The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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                 | lo signal wor | d.                                    |
| Hazard statements           | lo known sig  | nificant effects or critical hazards. |
| Precautionary statements    |               |                                       |
| Prevention                  | ot applicable | 9.                                    |
| Response                    | ot applicable | 9.                                    |
| Storage                     | ot applicable | 9.                                    |
| Disposal                    | ot applicable | Э.                                    |
| Supplemental label elements | ot applicable | 9.                                    |

### **SECTION 2: Hazards identification**

| : Not applicable.   |
|---|
| ements  |
| : Not applicable.   |
| : Not applicable.   |
|   |
| : ₱his mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| : None known.   |
|   |

### **SECTION 3: Composition/information on ingredients**

3.2 Mixtures

: 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 I | measures   |
|--------------------------------|--|
| Eye contact                    | : 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                     | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  |
| Skin contact                   | <ul> <li>Fush contaminated skin with plenty of water. Remove contaminated clothing and<br/>shoes. Get medical attention if symptoms occur.</li> </ul>  |
| Ingestion                      | : Wash out mouth with water. 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     | : $\mathbf{N}$ o action shall be taken involving any personal risk or without suitable training.   |

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Over-exposure signs/symptoms** 

| Eye contact  | : No specific data. |
|--------------|---------------------|
| Inhalation   | : No specific data. |
| Skin contact | : No specific data. |
| Ingestion    | : No specific data. |

#### 4.3 Indication of any immediate medical attention and special treatment needed

| Notes to physician | : Treat symptomatically. Contact poison treatment specialist immediately if large |
|--------------------|---|
|                    | quantities have been ingested or inhaled.   |
|                    |   |

**Specific treatments** : No specific treatment.

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|---|-------------------|
|---|-------------------|

## SECTION 5: Firefighting measures

| 5.1 Extinguishing media                               |   |
|---|---|
| Suitable extinguishing media                          | : $ ot\!$   |
| Unsuitable extinguishing media                        | : None known.   |
| 5.2 Special hazards arising                           | from the substance or mixture   |
| Hazards from the substance or mixture                 | : $\mathbf{k}$ a fire or if heated, a pressure increase will occur and the container may burst.   |
| Hazardous combustion products                         | : No specific data.   |
| 5.3 Advice for firefighters                           |   |
| Special protective actions for fire-fighters          | Fromptly isolate the scene by removing all persons from the vicinity of the incident if<br>there is a fire. No action shall be taken involving any personal risk or without suitable<br>training. |
| Special protective<br>equipment for fire-<br>fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.                             |

### **SECTION 6: Accidental release measures**

| 6.1 Personal precautions, p     | rotective equipment and emergency procedures  |
|---------------------------------|---|
| For non-emergency<br>personnel  | : No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilt material. Put on appropriate personal<br>protective equipment.              |
| For emergency<br>responders     | : Fspecialised 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   | : Kvoid 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 fe     | r containment and cleaning up   |
| Methods for cleaning up         | : 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.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information.   |

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

| Protective measures<br>Advice on general<br>occupational hygiene | <ul> <li>Put on appropriate personal protective equipment (see Section 8).</li> <li>Fating, 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.</li> </ul> |
|--|--|
|--|--|

#### 7.2 Conditions for safe storage, including any incompatibilities

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|---|------|

### **SECTION 7: Handling and storage**

| Storage | : 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

- : Industrial applications, Professional applications.
- Industrial sector specific : Not available. solutions

### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

#### **Occupational exposure limits**

No exposure limit value known.

#### **Biological exposure indices**

No exposure indices known.

Recommended monitoring procedures : Reference should be made to appropriate monitoring standards. 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 | : <b>C</b> ood general ventilation should be sufficient to control worker exposure to airborne contaminants.  |
| Individual protection meas       | sures   |
| 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            | : Kppropriate 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.   |

### **SECTION 8: Exposure controls/personal protection**

| 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<br>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**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

#### 9.1 Information on basic physical and chemical properties

| Appearance                                      |   |                 |       |          |             |          |          |               |
|---|---|-----------------|-------|----------|-------------|----------|----------|---------------|
| Physical state                                  | : | Liquid.         |       |          |             |          |          |               |
| Colour  | 1 | Not available.  |       |          |             |          |          |               |
| Odour   | 1 | Not available.  |       |          |             |          |          |               |
| Odour threshold                                 | : | Not available.  |       |          |             |          |          |               |
| Melting point/freezing<br>point                 | 1 | 0°C             |       |          |             |          |          |               |
| Initial boiling point and boiling range         | 1 | 100°C           |       |          |             |          |          |               |
| Flammability                                    | 1 | Not applicable. |       |          |             |          |          |               |
| Upper/lower flammability<br>or explosive limits | 1 | Not available.  |       |          |             |          |          |               |
| Flash point                                     | 1 | Not available.  |       |          |             |          |          |               |
| Auto-ignition<br>temperature                    | 1 | Not available.  |       |          |             |          |          |               |
| Decomposition<br>temperature                    | 1 | Not available.  |       |          |             |          |          |               |
| рН  | 1 | 7.5             |       |          |             |          |          |               |
| Viscosity                                       | 1 | Not available.  |       |          |             |          |          |               |
| Solubility(ies)                                 | : | Media           |       |          | Result      |          |          |               |
|   |   | water           |       |          | Soluble     |          |          |               |
| Miscible with water                             |   | Yes.            |       |          |             |          |          |               |
| Partition coefficient: n-<br>octanol/water      | : | Not applicable. |       |          |             |          |          |               |
| Vapour pressure                                 | : |                 | Vapou | r Pressu | ire at 20°C | Va       | oour pre | ssure at 50°C |
|   |   | Ingredient name | mm Hg | kPa      | Method      | mm<br>Hg | kPa      | Method        |
|   |   | water           | 17.5  | 2.3      | -           | 92.258   | 12.3     | -             |
| Evaporation rate                                | 1 | Not available.  |       |          |             |          |          |               |
| Relative density                                | 1 | Not available.  |       |          |             |          |          |               |
| Vapour density                                  | 1 | Not available.  |       |          |             |          |          |               |
| vapour density                                  | 1 |                 |       |          |             |          |          |               |

- : Not available.
- **Explosive properties** : Not available.

**Oxidising properties** 

- Particle characteristics Median particle size
- : Not applicable.

: Not available.

#### 9.2 Other information

No additional information.

| 10.1 Reactivity                          | : No specific test data related to reactivity available for this product or its ingredients.           |
|--|--|
| 10.2 Chemical stability                  | : The product is stable.   |
| 10.3 Possibility of hazardous reactions  | : <b>I</b> nder normal conditions of storage and use, hazardous reactions will not occur.              |
| 10.4 Conditions to avoid                 | : No specific data.  |
| 10.5 Incompatible materials              | : $\mathbf{M}$ ay react or be incompatible with oxidising materials.                                   |
| 10.6 Hazardous<br>decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

# SECTION 11: Toxicological information

|                                |            | U                          |                            |                   |             |
|--------------------------------|------------|----------------------------|----------------------------|-------------------|-------------|
| 11.1 Information on toxico     | log        | ical effects               |                            |                   |             |
| Acute toxicity                 |            |                            |                            |                   |             |
| Acute toxicity estimates       |            |                            |                            |                   |             |
| N/A                            |            |                            |                            |                   |             |
| Irritation/Corrosion           |            |                            |                            |                   |             |
| <b>Conclusion/Summary</b>      | 1          | Not availat                | ole.                       |                   |             |
| <u>Sensitiser</u>              |            |                            |                            |                   |             |
| <b>Conclusion/Summary</b>      | 1          | Not availat                | ole.                       |                   |             |
| Mutagenicity                   |            |                            |                            |                   |             |
| <b>Conclusion/Summary</b>      | :          | Not availat                | ole.                       |                   |             |
| <b>Carcinogenicity</b>         |            |                            |                            |                   |             |
| Conclusion/Summary             | 1          | Not availat                | ole.                       |                   |             |
| Reproductive toxicity          |            |                            |                            |                   |             |
| Conclusion/Summary             | 1          | Not availat                | ole.                       |                   |             |
| <b>Teratogenicity</b>          |            |                            |                            |                   |             |
| Conclusion/Summary             |            |                            |                            |                   |             |
| Specific target organ toxi     | <u>cit</u> | <u>y (single ex</u>        | <u>posure)</u>             |                   |             |
| Not available.                 |            |                            |                            |                   |             |
| Specific target organ toxi     | <u>cit</u> | y (repeated                | <u>exposure)</u>           |                   |             |
| Not available.                 |            |                            |                            |                   |             |
| Aspiration hazard              |            |                            |                            |                   |             |
| Not available.                 |            |                            |                            |                   |             |
| Information on likely          | ۰.         | Not availat                | hle                        |                   |             |
| routes of exposure             |            | 1 of availar               |                            |                   |             |
| Potential acute health eff     | <u>ect</u> | <u>s</u>                   |                            |                   |             |
| Inhalation                     | :          | No known                   | significant effects or cri | tical hazards.    |             |
| Ingestion                      | 1          | No known                   | significant effects or cri | tical hazards.    |             |
| Skin contact                   | :          | No known                   | significant effects or cri | tical hazards.    |             |
| Eye contact                    | 1          | No known                   | significant effects or cri | tical hazards.    |             |
| Symptoms related to the        | <u>ph</u>  | <mark>ysical, che</mark> n | nical and toxicologica     | l characteristics |             |
| Inhalation                     | 1          | No specific                | c data.                    |                   |             |
| Ingestion                      | 1          | No specific                | c data.                    |                   |             |
|                                |            |                            |                            |                   |             |
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### **SECTION 11: Toxicological information**

|                             | <u> </u>   |
|-----------------------------|--|
| Skin contact                | : No specific data.  |
| Eye contact                 | : No specific data.  |
| Delayed and immediate       | effects as well as chronic effects from short and long-term exposure |
| <u>Short term exposure</u>  |  |
| 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    | <u>effects</u>   |
| <b>Conclusion/Summary</b>   | : Not available.   |
| General                     | : 📈 known significant effects or critical hazards.                   |
| Carcinogenicity             | : 📈 known significant effects or critical hazards.                   |
| Mutagenicity                | : No known significant effects or critical hazards.                  |
| Reproductive toxicity       | : No known significant effects or critical hazards.                  |
| SECTION 12. Ecol            | ogical information   |

### **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Conclusion/Summary** : Not available.

#### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

#### 12.3 Bioaccumulative potential

Not available.

#### 12.4 Mobility in soil

Soil/water partition<br/>coefficient (Koc): Not available.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 met<br>Product | hods   |   |  |   |                              |
|-------------------------------------|--|---|--|---|------------------------------|
| Methods of disposal                 | of this proc<br>requireme<br>regional lo<br>via a licens | duct, solutions and any b<br>nts of environmental pro<br>cal authority requiremen<br>sed waste disposal conti | by-products should at<br>tection and waste dis<br>its. Dispose of surplu<br>ractor. Waste should | ed wherever possible. Di<br>all times comply with the<br>sposal legislation and any<br>us and non-recyclable pro<br>l not be disposed of untre<br>of all authorities with juris | e<br>y<br>oducts<br>eated to |
| Hazardous waste                     |  | present knowledge of th<br>defined by EU Directive  |  | uct is not regarded as ha   | zardous                      |
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### **SECTION 13: Disposal considerations**

#### 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           | ΙΑΤΑ           |
|------------------------------------|----------------|----------------|----------------|
| 14.1 UN number                     | Not regulated. | Not regulated. | Not regulated. |
| 14.2 UN proper<br>shipping name    | -              | -              | -              |
| 14.3 Transport<br>hazard class(es) | -              | -              | -              |
| 14.4 Packing<br>group              | -              | -              | -              |
| 14.5<br>Environmental<br>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: Not available.according to IMO

#### instruments

### **SECTION 15: Regulatory information**

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

#### 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.

#### **Ozone depleting substances**

Not listed.

#### Prior Informed Consent (PIC)

Not listed.

#### Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

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### **SECTION 15: Regulatory information**

| No listed substance   |   |
|---|---|
| Label   | : Not applicable.   |
| Seveso Directive  |   |
| This product is not controlle   | ed under the Seveso Directive.  |
| EU regulations  |   |
| Industrial emissions<br>(integrated pollution<br>prevention and control) -<br>Air   | : Not listed  |
| Industrial emissions<br>(integrated pollution<br>prevention and control) -<br>Water | : Not listed  |
| 15.2 Chemical safety<br>assessment  | : This product contains substances for which Chemical Safety Assessments might still be required. |
| International regulations   |   |
| Chemical Weapon Conve   | ntion List Schedules I, II & III Chemicals  |
| Not listed.   |   |
| Montreal Protocol   |   |
| Not listed.   |   |
| Stockholm Convention or   | n Persistent Organic Pollutants   |
| Not listed.   |   |
| Rotterdam Convention or   | <u>n Prior Informed Consent (PIC)</u>   |
| Not listed.   |   |
| UNECE Aarhus Protocol o   | on POPs and Heavy Metals  |
| Not listed.   |   |
| Inventory list  |   |
| United States   | : All components are active or exempted.  |
| <b>SECTION 16: Other</b>  | ' information   |

Indicates information that has changed from previously issued version.

| Abbreviations and | : ATE = Acute Toxicity Estimate   |
|-------------------|---|
| acronyms          | 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

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

#### Full text of abbreviated H statements

Not applicable.

#### Full text of classifications

Not applicable.

### **SECTION 16: Other information**

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#### Notice to reader

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