## **SAFETY DATA SHEET**



PathDetect pCIS-CK Plasmid, Part Number 219090

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

| -  |  |                                  |           |
|--|--|----------------------------------|-----------|
| 1.1 Product identifier                           |  |                                  |           |
| Product name                                     | : PathDetect pCIS-C                    | K Plasmid, Part Number 219090    |           |
| Part no.   | : 219090                               |                                  |           |
| 1.2 Relevant identified                          | uses of the substance or               | mixture and uses advised against |           |
| Material uses                                    | : Analytical reagent.<br>50 μg 1 μg/μl | pCIS-CK Negative Control Plasmid | 219090-51 |
| 1.3 Details of the suppl                         | lier of the safety data shee           | t                                |           |
| Agilent Technologies M<br>Hewlett-Packard-Str. 8 | lanufacturing GmbH & Co. k             | (G                               |           |
| 76337 Waldbronn                                  |  |                                  |           |
| Germany<br>0800 603 1000                         |  |                                  |           |
|  | son : pdl-msds_author@a                | adilent com                      |           |
| responsible for this S                           |  | agiient.com                      |           |
| 1.4 Emergency telepho                            | one number                             |                                  |           |
| Emergency telephone<br>number (with hours of     |  | 4)-870-8200418                   |           |

## **SECTION 2: Hazards identification**

| 2.1 Classification of the      | substance or mixture                         |
|--------------------------------|--|
| Product definition             | : Mixture                                    |
| <b>Classification accordin</b> | g to Regulation (EC) No. 1272/2008 [CLP/GHS] |
| Not classified.                |  |

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

operation)

| Signal word                 | : No signal word.                                  |    |
|-----------------------------|--|----|
| Hazard statements           | : No known significant effects or critical hazards | ;. |
| Precautionary statements    |  |    |
| Prevention                  | : Not applicable.                                  |    |
| Response                    | : Not applicable.                                  |    |
| Storage                     | : Not applicable.                                  |    |
| Disposal                    | : Not applicable.                                  |    |
| Supplemental label elements | : Not applicable.                                  |    |

## **SECTION 2: Hazards identification**

| Annex XVII - Restrictions<br>on the manufacture,<br>placing on the market<br>and use of certain<br>dangerous substances,<br>mixtures and articles | : Not applicable.   |
|---|---|
| Special packaging require   | ements  |
| Tactile warning of<br>danger  | : Not applicable.   |
| 2.3 Other hazards   |   |
| Product meets the<br>criteria for PBT or vPvB<br>according to<br>Regulation (EC) No.<br>1907/2006, Annex XIII                                     | : This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| Other hazards which do<br>not result in<br>classification   | : None known.   |

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 measures

| Eye contact                | <ul> <li>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower<br/>eyelids. Check for and remove any contact lenses. Get medical attention if irritation<br/>occurs.</li> </ul>  |
|----------------------------|--|
| 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>Flush 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 | : 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        | : No known significant effects or critical hazards. |
|--------------------|---|
| Inhalation         | : No known significant effects or critical hazards. |
| Skin contact       | : No known significant effects or critical hazards. |
| Ingestion          | : No known significant effects or critical hazards. |
| Over-exposure sign | <u>s/symptoms</u>                                   |

| 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

| Date of issue/Date of revision         : 30/06/2022         Date of previous issue         : No previous validation         Version | ı : | :1 | 2/10 |
|---|-----|----|------|
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| 2015/830 - Ireland                             |   |  |
|--|---|--|
| PathDetect pCIS-CK Plasmid, Part Number 219090 |   |  |
| SECTION 4: First ai                            | id measures   |  |
| Notes to physician                             | : Treat symptomatically. Contact poison treatment specialist immediately if large<br>quantities have been ingested or inhaled.  |  |
| Specific treatments                            | : No specific treatment.  |  |
| SECTION 5: Firefig                             | hting measures  |  |
| 5.1 Extinguishing media                        |   |  |
| Suitable extinguishing media                   | : Use an extinguishing agent suitable for the surrounding fire.   |  |
| Unsuitable extinguishing media                 | : None known.   |  |
| 5.2 Special hazards arising                    | from the substance or mixture   |  |
| Hazards from the substance or mixture          | : In 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 precautions for<br>fire-fighters       | <ul> <li>Promptly 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.</li> </ul> |  |
| Special protective                             | : Fire-fighters should wear appropriate protective equipment and self-contained   |  |

| Special protective  | : Fire-fighters should wear appropriate protective equipment and self-contained           |
|---------------------|---|
| equipment for fire- | breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.     |
| fighters            | 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, p     | rot  | ective 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     | :    | 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   | :    | 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 fo     | or c | 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                    | : Put on appropriate personal protective equipment (see Section 8).   |
|--|---|
| Advice on general occupational hygiene | : 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

| 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.

#### 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.

No DNELs/DMELs available.

#### PNECs

No PNECs available

| 8.2 Exposure controls<br>Appropriate engineering<br>controls | : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.  |
|--|---|
| Individual protection measu                                  | <u>res</u>  |
| 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. |

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

| 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<br>worn at all times when handling chemical products if a risk assessment indicates this is<br>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<br>they comply with the requirements of environmental protection legislation. In some<br>cases, fume scrubbers, filters or engineering modifications to the process equipment<br>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

| Physical state                                    | 1.1 | Liquid.                              |           |                    |          |                    |         |          |              |
|---|-----|--------------------------------------|-----------|--------------------|----------|--------------------|---------|----------|--------------|
| Colour  |     | Not available.                       |           |                    |          |                    |         |          |              |
|   |     |                                      |           |                    |          |                    |         |          |              |
| Odour   |     | Not available.                       |           |                    |          |                    |         |          |              |
| Odour threshold                                   |     | Not available.                       |           |                    |          |                    |         |          |              |
| Melting point/freezing<br>point                   | ÷   | 0°C                                  |           |                    |          |                    |         |          |              |
| Initial boiling point and<br>boiling range        | :   | 100°C (212°F)                        |           |                    |          |                    |         |          |              |
| Flammability (solid, gas)                         | :   | Not applicable.                      |           |                    |          |                    |         |          |              |
| Upper/lower flammability or explosive limits      | :   | Not available.                       |           |                    |          |                    |         |          |              |
| Flash point                                       | :   |                                      |           | Closed             | cup      |                    |         | Ope      | n cup        |
|   |     | Ingredient name                      | °C        | °F                 | Met      | hod                | °C      | °F       | Method       |
|   |     | Edetic acid                          | >100      | >212               | DIN 5    | 1758               |         |          |              |
|   |     |                                      |           |                    |          |                    |         | Metho    | bd           |
| Auto-ignition                                     | :   | Ingredient name                      |           | °C                 |          | °F                 |         | weind    | <sup>A</sup> |
| Auto-ignition<br>temperature                      | :   | Ingredient name<br>Edetic acid       |           | ° <b>C</b><br>>400 |          | ° <b>F</b><br>>752 |         | VDI 2263 |              |
| -   | :   |                                      |           | _                  |          | -                  |         |          |              |
| temperature<br>Decomposition<br>temperature       |     | Edetic acid                          |           | _                  |          | -                  |         |          |              |
| temperature<br>Decomposition<br>temperature<br>pH | :   | Edetic acid<br>Not available.        |           | _                  |          | -                  |         |          |              |
| temperature<br>Decomposition                      | :   | Edetic acid<br>Not available.<br>7.5 | following | >400               | . cold M | >752               | t hot w | VDI 2263 |              |

PathDetect pCIS-CK Plasmid, Part Number 219090

## **SECTION 9: Physical and chemical properties**

Partition coefficient: noctanol/water

: Not applicable.

| Vapour pressure             | :  | Vapou    | r Pressure | e at 20°C | Vap         | our press | ure at 50°C |
|-----------------------------|--|----------|------------|-----------|-------------|-----------|-------------|
|                             | Ingredient nam   | ne mm Hg | kPa        | Method    | mm<br>Hg    | kPa       | Method      |
|                             | water  | 23.8     | 3.2        |           | 92.258      | 12.3      |             |
|                             | 2-Amino-2-<br>(hydroxymethyl)prop<br>1,3-diol hydrochlorid |          | 0.0000036  |           | 0.000007501 | 0.000001  |             |
| Evaporation rate            | : Not available.   |          |            |           |             |           |             |
| Relative density            | : Not available.   |          |            |           |             |           |             |
| Vapour density              | : Not available.   |          |            |           |             |           |             |
| <b>Explosive properties</b> | : Not available.   |          |            |           |             |           |             |
| <b>Oxidising properties</b> | : Not available.   |          |            |           |             |           |             |
| Particle characteristics    |  |          |            |           |             |           |             |
| Median particle size        | : Not applicable.  |          |            |           |             |           |             |

No additional information.

### SECTION 10: Stability and reactivity : No specific test data related to reactivity available for this product or its ingredients. **10.1 Reactivity 10.2 Chemical stability** : The product is stable. **10.3 Possibility of** : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions 10.4 Conditions to avoid : No specific data. **10.5 Incompatible** : May react or be incompatible with oxidising materials. materials : Under normal conditions of storage and use, hazardous decomposition products should **10.6 Hazardous** decomposition products not be produced.

## **SECTION 11: Toxicological information**

| 11.1 Information on toxico     | ological effects                    |                          |            |      |
|--------------------------------|-------------------------------------|--------------------------|------------|------|
| Acute toxicity                 |                                     |                          |            |      |
| Not available.                 |                                     |                          |            |      |
| Acute toxicity estimates       | <u>S</u>                            |                          |            |      |
| N/A                            |                                     |                          |            |      |
| Irritation/Corrosion           |                                     |                          |            |      |
| <b>Conclusion/Summary</b>      | : Not available.                    |                          |            |      |
| <u>Sensitiser</u>              |                                     |                          |            |      |
| <b>Conclusion/Summary</b>      | : Not available.                    |                          |            |      |
| Mutagenicity                   |                                     |                          |            |      |
| <b>Conclusion/Summary</b>      | : Not available.                    |                          |            |      |
| <b>Carcinogenicity</b>         |                                     |                          |            |      |
| Conclusion/Summary             | : Not available.                    |                          |            |      |
| Date of issue/Date of revision | : 30/06/2022 Date of previous issue | : No previous validation | Version :1 | 6/10 |

#### PathDetect pCIS-CK Plasmid, Part Number 219090 SECTION 11: Toxicological information **Reproductive toxicity** : Not available. **Conclusion/Summary 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. Information on likely : Not available. routes of exposure Potential acute health effects Inhalation : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards. : No known significant effects or critical hazards. Skin contact Eye contact : No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics Inhalation : No specific data. Ingestion : No specific data. Skin contact : No specific data. : No specific data. Eye contact Delayed and immediate effects as well as chronic effects from short and long-term exposure Short term exposure **Potential immediate** : Not available. effects **Potential delayed** : Not available. effects Long term exposure **Potential immediate** : Not available. effects Potential delayed : Not available. effects Potential chronic health effects General : No known significant effects or critical hazards. Carcinogenicity : No 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: Ecological information**

#### 12.1 Toxicity

**Conclusion/Summary** : Not available.

#### 12.2 Persistence and degradability

Not available.

#### 12.3 Bioaccumulative potential

PathDetect pCIS-CK Plasmid, Part Number 219090

## **SECTION 12: Ecological information**

Not available.

| 12.4 Mobility in soil                                  |                  |
|--|------------------|
| Soil/water partition<br>coefficient (K <sub>oc</sub> ) | : 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 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 | <ul> <li>The generation of waste should be avoided or minimised wherever possible. Waste<br/>packaging should be recycled. Incineration or landfill should only be considered when<br/>recycling is not feasible.</li> </ul>  |
| Special precautions | This material and its container must be disposed of in a safe way. Empty containers or<br>liners may retain some product residues. Avoid dispersal of spilt material and runoff<br>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.

PathDetect pCIS-CK Plasmid, Part Number 219090

## **SECTION 14: Transport information**

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 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 Label : Not applicable. **Other EU regulations** Ozone depleting substances (1005/2009/EU) Not listed. Prior Informed Consent (PIC) (649/2012/EU) Not listed. Persistent Organic Pollutants 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** 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** : All components are listed or exempted. Canada : All components are listed or exempted. China : All components are listed or exempted. : All components are listed or exempted. Europe Japan : Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): All components are listed or exempted. **New Zealand** : All components are listed or exempted. **Philippines** : All components are listed or exempted. **Republic of Korea** : All components are listed or exempted.

## **SECTION 15: Regulatory information**

| 15.2 Chemical safety assessment | : This product contains substances for which Chemical Safety Assessments might still be required. |
|---------------------------------|---|
| Viet Nam                        | : All components are listed or exempted.  |
| United States                   | : All components are active or exempted.  |
| Turkey                          | : Not determined.   |
| Thailand                        | : Not determined.   |
| Taiwan                          | : All components are listed or exempted.  |
|                                 |   |

## **SECTION 16: Other 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 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 | : 30/06/2022             |
|---------------------------------|--------------------------|
| Date of previous issue          | : No previous validation |
| Version                         | : 1                      |

#### Notice to reader

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