SAFETY DATA SHEET

PNH detection kit (R), Part Number 8939002

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

1.1 Product identifier

Product name: PNH detection kit (R), Part Number 8939002
Part no. (chemical kit): 8939002
Part no.:
- PE Mouse anti-human CD59 8939995
- FITC Mouse anti-human CD235a 8939994

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

Material uses:
- For research use only. Not for use in diagnostic procedures (RUO).
- PE Mouse anti-human CD59 0.5 ml
- FITC Mouse anti-human CD235a 0.5 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000
e-mail address of person responsible for this SDS: pdl-msds_author@agilent.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition:
- PE Mouse anti-human CD59 Mixture
- FITC Mouse anti-human CD235a Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
- PE Mouse anti-human CD59
  - H412 LONG-TERM (CHRONIC) AQUATIC HAZARD
- FITC Mouse anti-human CD235a
  - H412 LONG-TERM (CHRONIC) AQUATIC HAZARD

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
**SECTION 2: Hazards identification**

<table>
<thead>
<tr>
<th>Signal word</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No signal word.</td>
<td>No signal word.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard statements</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td>H412</td>
<td>H412 - Harmful to aquatic life with long lasting effects.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary statements</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td>P273</td>
<td>P273 - Avoid release to the environment.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Storage</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disposal</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td>P501</td>
<td>P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supplemental label elements</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special packaging requirements</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tactile warning of danger</td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.3 Other hazards</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</td>
<td>This mixture does not contain any substances that are assessed to be a PBT or a vPvB.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other hazards which do not result in classification</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None known.</td>
<td>None known.</td>
</tr>
</tbody>
</table>

PNH detection kit (R), Part Number 8939002

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Mouse anti-human CD59 Sodium azide</td>
<td>EC: 247-852-1, CAS: 26628-22-8, Index: 011-004-00-7</td>
<td>≤1</td>
<td>Acute Tox. 2, H300 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH032</td>
<td>[1][2]</td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a Sodium azide</td>
<td>EC: 247-852-1, CAS: 26628-22-8, Index: 011-004-00-7</td>
<td>≤1</td>
<td>Acute Tox. 2, H300 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) EUH032</td>
<td>[1][2]</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

| : PE Mouse anti-human CD59 | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs. |
| : FITC Mouse anti-human CD235a | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs. |

Inhalation

| : PE Mouse anti-human CD59 | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| : FITC Mouse anti-human CD235a | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
SECTION 4: First aid measures

Skin contact:
- **PE Mouse anti-human CD59**: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- **FITC Mouse anti-human CD235a**: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- **PE Mouse anti-human CD59**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- **FITC Mouse anti-human CD235a**: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion:
- **PE Mouse anti-human CD59**: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- **FITC Mouse anti-human CD235a**: Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders:
- **PE Mouse anti-human CD59**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- **FITC Mouse anti-human CD235a**: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

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.
SECTION 4: First aid measures

### Ingestion

- **PE Mouse anti-human CD59**
  - No known significant effects or critical hazards.

- **FITC Mouse anti-human CD235a**
  - No known significant effects or critical hazards.

### Over-exposure signs/symptoms

#### Eye contact
- **PE Mouse anti-human CD59**
  - No specific data.

- **FITC Mouse anti-human CD235a**
  - No specific data.

#### Inhalation
- **PE Mouse anti-human CD59**
  - No specific data.

- **FITC Mouse anti-human CD235a**
  - No specific data.

#### Skin contact
- **PE Mouse anti-human CD59**
  - No specific data.

- **FITC Mouse anti-human CD235a**
  - No specific data.

#### Ingestion
- **PE Mouse anti-human CD59**
  - No specific data.

- **FITC Mouse anti-human CD235a**
  - No specific data.

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

#### Notes to physician
- **PE Mouse anti-human CD59**
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

- **FITC Mouse anti-human CD235a**
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### Specific treatments
- **PE Mouse anti-human CD59**
  - No specific treatment.

- **FITC Mouse anti-human CD235a**
  - No specific treatment.

SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media
- **PE Mouse anti-human CD59**
  - Use an extinguishing agent suitable for the surrounding fire.

- **FITC Mouse anti-human CD235a**
  - Use an extinguishing agent suitable for the surrounding fire.

#### Unsuitable extinguishing media
- **PE Mouse anti-human CD59**
  - None known.

- **FITC Mouse anti-human CD235a**
  - None known.

### 5.2 Special hazards arising from the substance or mixture

#### Hazards from the substance or mixture
- **PE Mouse anti-human CD59**
  - In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- **FITC Mouse anti-human CD235a**
  - In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

#### Hazardous combustion products
- **PE Mouse anti-human CD59**
  - No specific data.

- **FITC Mouse anti-human CD235a**
  - No specific data.
SECTION 5: Firefighting measures

5.3 Advice for firefighters

Special precautions for fire-fighters:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a

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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a

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:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a

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). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Date of issue/Date of revision: 10/08/2020  Date of previous issue: No previous validation  Version: 1
SECTION 6: Accidental release measures

Methods for cleaning up:

**PE Mouse anti-human CD59**
- 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.

**FITC Mouse anti-human CD235a**
- 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**:
- **PE Mouse anti-human CD59**
  - Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

- **FITC Mouse anti-human CD235a**
  - Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene**:
- **PE Mouse anti-human CD59**
  - 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.

- **FITC Mouse anti-human CD235a**
  - 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**:
- **PE Mouse anti-human CD59**
  - 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.

- **FITC Mouse anti-human CD235a**
  - 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 7: Handling and storage

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**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE  Mouse anti-human CD59 Sodium azide</td>
<td>EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin. STEL: 0.3 mg/m³, (as NaN₃) 15 minutes. TWA: 0.1 mg/m³, (as NaN₃) 8 hours.</td>
</tr>
<tr>
<td>FITC  Mouse anti-human CD235a Sodium azide</td>
<td>EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin. STEL: 0.3 mg/m³, (as NaN₃) 15 minutes. TWA: 0.1 mg/m³, (as NaN₃) 8 hours.</td>
</tr>
</tbody>
</table>

**Industrial sector specific solutions**

No applicable.

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

8.1 Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE  Mouse anti-human CD59 Sodium azide</td>
<td>EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin. STEL: 0.3 mg/m³, (as NaN₃) 15 minutes. TWA: 0.1 mg/m³, (as NaN₃) 8 hours.</td>
</tr>
<tr>
<td>FITC  Mouse anti-human CD235a Sodium azide</td>
<td>EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin. STEL: 0.3 mg/m³, (as NaN₃) 15 minutes. TWA: 0.1 mg/m³, (as NaN₃) 8 hours.</td>
</tr>
</tbody>
</table>

**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**

Date of issue/Date of revision : 10/08/2020  Date of previous issue : No previous validation  Version : 1
SECTION 8: Exposure controls/personal protection

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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

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

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

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

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: PE  Mouse anti-human CD59 Liquid.
FITC Mouse anti-human CD235a Liquid.

Colour: PE  Mouse anti-human CD59 Not available.
FITC  Mouse anti-human CD235a Not available.

Odour: PE  Mouse anti-human CD59 Not available.
FITC  Mouse anti-human CD235a Not available.

Odour threshold: PE  Mouse anti-human CD59 Not available.
FITC  Mouse anti-human CD235a Not available.

pH: PE  Mouse anti-human CD59 Not available.
FITC  Mouse anti-human CD235a Not available.
## SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>PE Mouse anti-human CD59</th>
<th>FITC Mouse anti-human CD235a</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>0°C</td>
<td>0°C</td>
</tr>
<tr>
<td><strong>Initial boiling point and boiling range</strong></td>
<td>100°C</td>
<td>100°C</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Upper/lower flammability or explosive limits</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour pressure</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Solubility(ies)</strong></td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td><strong>Partition coefficient: n-octanol/water</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
SECTION 9: Physical and chemical properties

Explosive properties:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
Not available.

Oxidising properties:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
Not available.

9.2 Other information
No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
The product is stable.

10.3 Possibility of hazardous reactions:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
No specific data.

10.5 Incompatible materials:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products:
- PE Mouse anti-human CD59
- FITC Mouse anti-human CD235a
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

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Mouse anti-human CD59</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>20 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>50 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>27 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>20 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>50 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>
SECTION 11: Toxicological information

**Acute toxicity estimates**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Mouse anti-human CD59</td>
<td>3000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>PE Mouse anti-human CD59</td>
<td>27</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sodium azide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a</td>
<td>3000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a</td>
<td>27</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sodium azide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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.

**Information on likely routes of exposure**

- PE Mouse anti-human CD59: Not available.
- FITC Mouse anti-human CD235a: Not available.

**Potential acute health effects**

**Inhalation**

- PE Mouse anti-human CD59: No known significant effects or critical hazards.
- FITC Mouse anti-human CD235a: No known significant effects or critical hazards.

**Ingestion**

- PE Mouse anti-human CD59: No known significant effects or critical hazards.
- FITC Mouse anti-human CD235a: No known significant effects or critical hazards.

**Skin contact**

- PE Mouse anti-human CD59: No known significant effects or critical hazards.
- FITC Mouse anti-human CD235a: No known significant effects or critical hazards.

**Eye contact**

- PE Mouse anti-human CD59: No known significant effects or critical hazards.
- FITC Mouse anti-human CD235a: No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Inhalation**

- PE Mouse anti-human CD59: No specific data.
- FITC Mouse anti-human CD235a: No specific data.
SECTION 11: Toxicological information

Ingestion:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Skin contact:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Eye contact:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Potential chronic health effects:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Carcinogenicity:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Mutagenicity:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Teratogenicity:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Developmental effects:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

Fertility effects:
- PE  Mouse anti-human CD59
- FITC  Mouse anti-human CD235a

SECTION 12: Ecological information

12.1 Toxicity
SECTION 12: Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Mouse anti-human CD59 Sodium azide</td>
<td>Acute EC50 0.348 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 6.4 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 4.2 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 0.68 mg/l Fresh water</td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a Sodium azide</td>
<td>Acute EC50 0.348 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 6.4 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 4.2 mg/l Fresh water</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 0.68 mg/l Fresh water</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment
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

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.
SECTION 13: Disposal considerations

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>14.5 Environmental hazards</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

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 IMO instruments: 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

Label: PE Mouse anti-human CD59 Not applicable.
      FITC Mouse anti-human CD235a Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.
SECTION 15: Regulatory information

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE Mouse anti-human CD59 Aquatic Chronic 3, H412</td>
<td>Calculation method</td>
</tr>
<tr>
<td>FITC Mouse anti-human CD235a Aquatic Chronic 3, H412</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision : 10/08/2020  Date of previous issue : No previous validation  Version : 1
**SECTION 16: Other information**

### Full text of abbreviated H statements

<table>
<thead>
<tr>
<th>PE Mouse anti-human CD59</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H300</td>
<td>Fatal if swallowed.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>EUH032</td>
<td>Contact with acids liberates very toxic gas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FITC Mouse anti-human CD235a</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H300</td>
<td>Fatal if swallowed.</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life.</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>EUH032</td>
<td>Contact with acids liberates very toxic gas.</td>
</tr>
</tbody>
</table>

### Full text of classifications [CLP/GHS]

<table>
<thead>
<tr>
<th>PE Mouse anti-human CD59</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2</td>
<td>ACUTE TOXICITY - Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 3</td>
<td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FITC Mouse anti-human CD235a</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2</td>
<td>ACUTE TOXICITY - Category 2</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 3</td>
<td>LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3</td>
</tr>
</tbody>
</table>

**Date of issue/ Date of revision**: 10/08/2020

**Date of previous issue**: No previous validation

**Version**: 1

**Notice to reader**

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