SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier
- Product Name: RNAscope® Hydrogen Peroxide
- Product No: 322335

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Identified uses: For Research Use Only. Not for diagnostic use.

1.3 Details of the supplier of the safety data sheet
- Supplier: Advanced Cell Diagnostics
- Address: 7707 Gateway Blvd.
  Newark, CA 94560
- Tel: (510) 576-8800

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
- Classification (EC 1272/2008)
  - Physical and Chemical: Not classified
  - Human health: Not classified
  - Environment: Not classified

- Classification (1999/45/EEC): Not classified
  The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2 Label elements
- Contains: HYDROGEN PEROXIDE SOLUTION . . . . %
- Label In Accordance with (EC) No. 1272/2008
- No pictogram required
- Supplemental label information
  - EUH210 Safety data sheet available on request

2.3 Other Hazards
- Not classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures
- HYDROGEN PEROXIDE SOLUTION . . . . % 1-5 %
  - CAS-No: 7722-84-1
  - EC No.: 231-765-0
  - Classification (EC 1272/2008): Ox Liq. 1 H271, Acute Tox. 4 H302, Skin Corr. 1A H314, STOT SE 3 H335
  - Classification (67/548/EEC): R5, O;R8, C;R35, Xn;R20/22

The full test for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID AND MEASURES

4.1 Description of first aid measures
- Inhalation
  Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

- Ingestion
  NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention if any discomfort continues.

- Skin Contact
  Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
**RNAseq® Hydrogen Peroxide**

**Eye Contact**
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2 **Most important symptoms and effects, both acute and delayed**
- **General information**
  No specific information.

4.3 **Indication of any immediate medical attention and special treatment needed.**
- Treat Symptomatically.

### SECTION 5: FIRE FIGHTING MEASURES

5.1 **Extinguishing Media**
- **Extinguishing Media**
  This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water.

5.2 **Special hazards arising from the substance or mixture**
- **Hazardous combustion products**
  Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3 **Advice for fire fighters**
- **Special Fire Fighting Procedures**
  No specific fire fighting procedure given.
- **Protective equipment for fire fighters**
  Self-contained breathing apparatus and full protective clothing must be worn in case of fire in.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 **Personal precautions, protective equipment and emergency procedures**
- Wear protective clothing as described in Section 8 of this safety data sheet.

6.2 **Environmental Precautions**
- Do not discharge into drains, water courses or onto the ground.

6.3 **Methods and materials for containment and cleaning up**
- Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4 **Reference to other sections**
- Wear protective clothing as described in Section 8 of this safety data sheet.

### SECTION 7: HANDLING AND STORAGE

7.1 **Precautions for safe handling**
- Avoid spilling, skin and eye contact.

7.2 **Conditions for safe storage, including any incompatibilities**
- Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

7.3 **Specific end user(s)**
- The identified uses for this product are detailed in Section 1.2.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 **Control Parameters**
- **Ingredient Comments**
  No exposure limits noted for ingredient(s)

8.2 **Exposure controls**
- **Protective equipment**

#### Engineering measures
- Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapours.
- **Respiratory Equipment**
  No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
RNAscope® Hydrogen Peroxide

Hand Protection
Use suitable protective gloves if risk of skin contact.

Eye Protection
If risk of splashing, wear safety goggles or face shield.

Other Protection
Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures
DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
   Appearance   Liquid

9.2 Other information
   Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
   No specific reactivity hazards associated with this product.

10.2 Chemical stability
   Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions
   No determined

10.4 Conditions to avoid
   Avoid excessive heat for prolonged periods of time. Avoid contact with strong oxidizers. Avoid contact with strong reducing agents.

10.5 Incompatible Materials
   Materials to avoid
   Strong oxidizing substances. Strong reducing agents.

10.6 Hazardous decomposition products
   Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
   No data on the toxicity of the formulation are available. The classification of the formulation is calculated based on the composition of hazardous components
   Inhalation
   In high concentrations, vapours may irritate throat and respiration system and cause coughing.
   Ingestion
   May cause discomfort if swallowed.
   Skin Contact
   Liquid may irritate skin.
   Eye Contact
   Spray and vapour in the eyes may cause irritation and smarting.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
   Acute Fish Toxicity
   Not considered toxic to fish

12.2 Persistence and degradability
   Degradability
   No data available

12.3 Bioaccumulative potential
   Bioaccumulative potential
   No data available on bioaccumulation
12.4 Mobility in soil

Mobility

No data available

12.5 Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6 Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

General Information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority

13.1 Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes: Not classified
Rail Transport Notes: Not classified
Sea Transport Notes: Not classified
Air Transport Notes: Not classified

14.1 UN Number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No

14.5 Special precautions for user

Not applicable

14.6 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

Environmental Listing


Approved Code of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40. CHIP HSG(108).

EU Legislation


15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.
### SECTION 16: OTHER INFORMATION

<table>
<thead>
<tr>
<th>Risk Phrases In Full</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>R35</td>
<td>Causes severe burns.</td>
</tr>
<tr>
<td>R8</td>
<td>Contact with combustible material may cause fire.</td>
</tr>
<tr>
<td>R20/22</td>
<td>Harmful by inhalation and if swallowed</td>
</tr>
<tr>
<td>R5</td>
<td>Heating may cause an explosion</td>
</tr>
<tr>
<td>R37</td>
<td>Irritating to respiratory system.</td>
</tr>
<tr>
<td>NC</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazard Statements In Full</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage.</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>H271</td>
<td>May cause fire or explosion, strong oxidizer.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company’s knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user’s responsibility to satisfy himself as to the suitability of such information for his own particular use.