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

1.1 Product Identifier
   Product Name: RNAscope® 2.5 HD Duplex AMP 7
   Product No: 322507

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
   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 (67/548/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…%.
   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

3.2 Mixtures
   HYDROGEN PEROXIDE SOLUTION…% 1-5%
   CAS-No: 7722-84-1  EC No.: 231-765-0
   Classification (EC 1272/2008)  Classification (67/548/EEC)
   Ox Lq. 1 H271  R5
   Acute Tox. 4 H302  O;R8
   Acute Tox. 4 H332  C;R35
   Skin Corr.1A H314  Xn;R20/22
   STOT SE 3 H335
   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.
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 material 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.
RNAsecope® 2.5 HD Duplex AMP 7

**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
Disposal of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

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

### Risk Phrases In Full
- **R35** Causes severe burns.
- **R8** Contact with combustible material may cause fire.
- **R20/22** Harmful by inhalation and if swallowed
- **R5** Heating may cause an explosion
- **R37** Irritating to respiratory system.
- **NC** Not classified

### Hazard Statements In Full
- **H314** Causes severe skin burns and eye damage.
- **H332** Harmful if inhaled.
- **H302** Harmful if swallowed.
- **H271** May cause fire or explosion, strong oxidizer.
- **H335** May cause respiratory irritation.

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### 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.