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

1.1 Product Identifier
   - Product Name: RNAscope® 2.5 LSx H₂O₂
   - Product No: 322754

1.2 Relevant identified uses of the substance or mixture and uses advised against
   - Identified uses: for further manufacture.

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
   - 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...%
     - CAS-No: 7722-84-1
     - EC No.: 231-765-0
     - 1-5 %
     - Classification (EC 1272/2008): Ox Liq. 1 H271
     - Classification (67/548/EEC): 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.
RNAscope® 2.5 LSx H₂O₂

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 vapors.

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
**RNAscope® 2.5 LSx H₂O₂**

**Engineering measures**
Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of vapors.

**Respiratory Equipment**
No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

**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 vapors.

**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**

**Eco toxicity**
Not regarded as dangerous for the environment.

**12.1 Toxicity**
**Acute Fish Toxicity**
Not considered toxic to fish.
12.2 Persistence and degradability
Degradability
No data available.

12.3 Bio accumulative potential
Bio accumulative 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

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.

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.