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

1.1 Product Identifier
Product Name: RNAscope® 2.5 LS Duplex Wash
Product No: 322464

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 (1999/45/EEC): Not classified

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2 Label elements
Label In Accordance with (EC) No. 1272/2008
No pictogram required

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures
<table>
<thead>
<tr>
<th>Lithium chloride</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 7447-41-8</td>
<td>EC No.: 231-212-3</td>
</tr>
</tbody>
</table>

Classification (EC 1272/2008): Acute Tox. 4 - H302 Skin Irrit. 2 - H315
Classification (67/548/EEC): Xn;R22 XiR36/38

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.

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.

SECTION 12: ECOLOGICAL INFORMATION

   Ecotoxicity
   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 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
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
R22 Harmful if swallowed
R36/38 Irritating to eyes and skin
NC Not classified

Hazard Statements In Full
H319 Causes serious eye irritation
H315 Causes skin irritation
H302 Harmful if swallowed

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.