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

1.1 Product Identifier
   Product Name: RNAscope® VS Duplex AMP 9
   Product No: 323319

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

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 eyes 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 fog.

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 firefighting procedure given.
Protective equipment for fire fighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

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 detained 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 general and local exhaust ventilation.

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 with soap & water if skin becomes 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
   Not 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
   Toxicological information
   No data on the toxicity of the formulation are available. The classification of the formulation is calculated based on the composition of hazardous components.

   Health warnings
   INHALATION: In high concentrations, vapors may irritate throat and respiratory system and cause coughing.
   INGESTION: May cause discomfort if swallowed. SKIN CONTACT: Liquid may irritate skin. EYE CONTACT: Spray and vapor 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
   Adsorption/Desorption Coefficient
   Not determined.

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. Dispose 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 Packing group
Not applicable.

14.5 Environmental hazards
Environmentally Hazardous Substance/Marine Pollutant
No

14.6 Special precautions for user
Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

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 for everyone 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
NC Not classified.

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.