

**SAFETY DATA SHEET**  
**RNAscope® 2.5 HD AMP 3**  
According to Regulation (EC) No 1907/2006

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

**1.1 Product Identifier**

Product Name RNAscope® 2.5 HD AMP 3  
Product No 322313

**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  
3960 Point Eden Way  
Hayward, CA 94545  
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	Repr. 1B – H360D
Environment	Not classified
Classification (1999/45/EEC)	Repr. Cat. 2;R61.

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

**2.2 Label elements**

Contains FORMAMIDE  
Label In Accordance with (EC) No. 1272/2008



Signal word Danger

Hazard statements

H360D

May damage the unborn child.

Precautionary Statements

P201  
P308+P313  
P501

Obtain special instructions before use.  
IF exposed or concerned: Get medical advice/attention.  
Dispose of contents/container in accordance with national regulations.

Supplemental Precautionary Statements

P202

Do not handle until all safety precautions have been read and understood.

P281

Use personal protective equipment as required.

P405

Store locked up.

P501

Dispose of contents/container to...

Supplemental label information

RCH002

Restricted to professional users

**2.3 Other Hazards**

Not classified as PBT/vPvB by current EU criteria.

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Mixtures

Formamide	10 - 30%
CAS-No: 75-12-7                      EC No.: 200-842-0	
Classification (EC 1272/2008) Repr. 1B – H360D	Classification (67/548/EEC) Repr. Cat. 2;R61

Sodium Hydroxide	< 1%
CAS-No: 1310-73-2                      EC No.: 215-185-5	
Classification (EC 1272/2008) Skin Corr. 1A                      H314	Classification (67/548/EEC) C;R35

Hydrochloric Acid ...%	< 1%
CAS-No: 7647-01-0                      EC No.: 231-595-7	
Classification (EC 1272/2008) Skin Corr. 1B                      H314 STOT SE 3 – H335	Classification (67/548/EEC) C;R34 Xi;R37

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

##### General information

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

##### Inhalation

Move the exposed person to fresh air at once. Provide rest, warmth, and fresh air. Get medical attention if any discomfort continues. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

##### Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

##### Skin Contact

Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.

##### Eye Contact

Remove victim immediately from source of exposure. 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 and get medical attention.

#### 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. 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.

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## 5.3 Advice for fire fighters

### Special Fire Fighting Procedures

Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. Dike and collect extinguishing water.

### 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

Wear necessary protective equipment. Stop leak if possible without risk. DO NOT touch spilled material. Absorb in vermiculite, dry sand or earth and place into containers.

### 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 contact with eyes, skin and clothing. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level.

### 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

Name	STD	TWA – 8 Hrs		STEL – 15 Min		Notes
Formamide	WEL	20 ppm	37 mg/m <sup>3</sup>	30 ppm	56 mg/m <sup>3</sup>	
Hydrochloric Acid ...%	WEL	1 ppm	2 mg/m <sup>3</sup>	5 ppm	8 mg/m <sup>3</sup>	
Sodium Hydroxide	WEL				2 mg/m <sup>3</sup>	

WEL = Workplace Exposure Limit

### 8.2 Exposure controls

Protective equipment



#### Engineering measures

Provide adequate general and local exhaust ventilation.

#### Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

#### Hand Protection

Use protective gloves.

#### Eye Protection

Use approved safety goggles or face shield.

#### Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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. When using, do not eat, drink or smoke.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance Clear 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 heat, flames and other sources of ignition. 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**

This material is toxic.

**Health warnings**

INGESTION: May cause stomach pain or vomiting. INHALATION: May cause irritation to the respiratory system. SKIN

CONTACT: May cause skin irritation/eczema. May cause sensitization by skin contact. EYE CONTACT: Irritating to eyes.

**SECTION 12: ECOLOGICAL INFORMATION**

**Ecotoxicity**

There are no data on the ecotoxicity of this product.

**12.1 Toxicity**

No data available.

**12.2 Persistence and 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. 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**

- 14.1 **UN Number**  
Not applicable.
- 14.2 **UN proper shipping name**  
Not applicable.
- 14.3 **Transport hazard class(es)**  
ADR/RID/AND Class                      Not classified for transportation.
- 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 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**  
Rivers (Prevention of Pollution) Act of 1961. Control of Pollution (Special Waste Regulations) Act of 1980.
  - Statutory Instruments**  
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.
  - 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. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG(108).
  - EU Legislation**  
System of specific information relating to Dangerous Preparations. 2001/58/EC. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.
- 15.2 **Chemical Safety Assessment**  
No chemical safety assessment has been carried out.

**SECTION 16: OTHER INFORMATION**

Risk Phrases in Full	
R34	Causes burns.
R35	Causes severe burns.
R37	Irritating to respiratory system/
R61	May cause harm to the unborn child.
Hazard Statements in Full	
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.

**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.