



SAFETY DATA SHEET

RNAscope® 2.5 HD Duplex 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 Duplex AMP 3
Product No 322503

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	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
P405
P501

Use personal protective equipment as required.
Store locked up.
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.

RNAscope® 2.5 HD Duplex AMP 3

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 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.

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.

RNAscope® 2.5 HD Duplex AMP 3

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 detailed 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 ³	30 ppm	56 mg/m ³	
Hydrochloric Acid ...%	WEL	1 ppm	2 mg/m ³	5 ppm	8 mg/m ³	
Sodium Hydroxide	WEL				2 mg/m ³	

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.

RNAscope® 2.5 HD Duplex AMP 3

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.