



# SAFETY DATA SHEET

## RNAscope® 2.5 HD Duplex AMP 4

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 4  
Product No 322504

#### 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	Skin Sens. 1 – H317
Environment	Not classified

Classification (1999/45/EEC) R43.

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

#### 2.2 Label elements

Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC No. 220-239-6  
Label In Accordance with (EC) No. 1272/2008



Signal Word

Warning

Hazard Statements

H317 May cause an allergic skin reaction.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P501 Dispose of contents/container in accordance with national regulations.

Supplementary Precautionary Statements

P272 Contaminated work clothing should not be allowed out of the workplace.  
P261 Avoid breathing vapor/spray.  
P321 Specific treatment (see medical advice on this label.)  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.

#### 2.3 Other Hazards

Not classified as PBT/vPvB by current EU criteria.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

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

METHYL-2H or METHYL-4 (3:1) Mixture of EC No. 220-239-6	< 1%
CAS-No: 55965-84-9	EC No.:
Classification (EC 1272/2008) Acute Tox. 3 – H301 Acute Tox. 3 – H311 Acute Tox. 3 – H331 Skin Corr. 1B – H314 Skin Sens. 1 – H317 Aquatic Acute 1 – H400 Aquatic Chronic 1 – H410	Classification (67/548/EEC) T;R23/24/25 C;R34 R43 N;R50/53

The full text 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

Treat symptomatically.

#### 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

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

#### Skin contact

May cause skin sensitization.

### 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 fire fighting procedure given.

#### Protective equipment for fire fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## 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**  
Avoid 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.  
**Storage class**  
Chemical storage.
- 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
Sodium Hydroxide	WEL		2 mg/m <sup>3</sup>	

WEL = Workplace Exposure Limit

### 8.2 Exposure controls

#### Protective equipment



#### 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 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**  
There are no known reactivity hazards associated with this product.
- 10.2 **Chemical stability**  
Stable under normal temperature conditions and recommended use.

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### 10.3 Possibility of hazardous reactions

Not available.

### 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

In case of fire, toxic gases (CO, CO<sub>2</sub>, NO<sub>x</sub>) may be formed.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

#### Toxicological information

No information available.

#### Health warnings

INHALATION: In high concentrations, vapors may irritate throat and respiratory system and cause coughing.

INGESTION: May cause discomfort if swallowed. SKIN CONTACT: May cause sensitization by skin contact. EYE

CONTACT: Spray and vapor in the eyes may cause irritation and smarting.

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## SECTION 12: ECOLOGICAL INFORMATION

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#### Ecotoxicity

Not regarded as dangerous for the environment.

### 12.1 Toxicity

No data available.

### 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

#### Surface tension

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.

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## SECTION 13: DISPOSAL CONSIDERATIONS

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#### 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.

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## SECTION 14: TRANSPORT INFORMATION

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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.

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### 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.

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## SECTION 15: REGULATORY INFORMATION

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

#### Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### 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

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.

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## SECTION 16: OTHER INFORMATION

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#### Risk Phrases in Full

R34	Causes burns.
R35	Causes severe burns.
R61	May cause sensitization by skin contact.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Hazard Statements in Full

H314	Causes skin irritation
H317	May cause an allergic skin reaction.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H410	Very toxic to aquatic life with long-lasting effects.
H400	Very toxic to aquatic life.

## 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.