

SAFETY DATA SHEET
RNAscope® Protease IV
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® Protease IV
Product No 322336

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	Skin Sens. 1 H317
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

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
	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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Propane – 1,2-diol		<1 %
CAS-No: 57-55-6	EC No.: 200-338-0	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Not classified	Not classified	

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

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

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

General information

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 vapours.

5.3 Advice for fire fighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

RNAscope® Protease IV

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 Control Parameters

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

There are no known reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

RNAscope® Protease IV

10.3 Possibility of hazardous reactions

No available

10.4 Conditions to avoid

Avoid excessive heat for prolonged periods of time. Avoid contact with strong oxidizers.

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

Toxicological information

No information available

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.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1 Toxicity

Acute Fish 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

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

14.2 UN proper shipping name

Not applicable

RNAscope® Protease IV

14.3 Transport hazard class(es)

Not applicable

14.4 Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No

14.5 Special precautions for user

Not applicable

14.6 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.

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.

SECTION 16: OTHER INFORMATION

Risk Phrases In Full

R34	Causes burns
R43	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 severe skin burns and eye damage.
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.