



SAFETY DATA SHEET

RNAscope® Multiplex FL v2 HRP C4

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® Multiplex FL v2 HRP C4
Product No 323121

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

3.1 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 ³ | |

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, CO₂, NO_x) may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

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.

SECTION 12: ECOLOGICAL INFORMATION

Eco toxicity

Not regarded as dangerous for the environment.

12.1 Toxicity

No data available.

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

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.

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.

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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

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.

SECTION 16: OTHER INFORMATION

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.