
1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: RNAscope™ HiPlex Pro Imaging Buffer
Product Number: 322080
Components: RNAscope™ HiPlex Pro Imaging Buffer Part A
RNAscope™ HiPlex Pro Imaging Buffer Part B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For research use only. Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company:	Advanced Cell Diagnostics	Telephone:	1-510-576-8800
	7707 Gateway Blvd	Fax:	1-510-576-8798
	Newark, CA, 94560, USA	Internet:	www.acdbio.com
		Email address:	info.acd@bio-technne.com

1.4 Emergency Telephone Number

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within U.S. 1-800-424-9300 Worldwide 1-703-527-3887
Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

2. HAZARDS IDENTIFICATION

See additional safety data sheets.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: RNAscope[™] HiPlex Pro Imaging Buffer Part A

Product Number: 322086

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For research use only. Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company: Advanced Cell Diagnostics
7707 Gateway Blvd
Newark, CA, 94560, USA

Telephone: 1-510-576-8800
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2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].

Combustible Dust

Short term (acute) aquatic hazard - Category 3

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]

Pictogram(s): None

Signal word: Warning.

Hazard Statement(s):

H402 Harmful to aquatic life

Precautionary Statement(s):

P273 Avoid release to the environment.

P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Other Hazards – Combustible Dust – May form explosible dust – air mixture if dispersed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
(+) – Sodium L-ascorbate	134-03-2	205-126-1	-	H402	≤100%

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If Swallowed

Rinse mouth with water. Do not induce vomiting unless directed to by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Avoid generation of dust. Fine dust dispersed in air may ignite. Sensitive to static discharge.

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values

8.2 Exposure controls**Appropriate Engineering Controls**

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal Protective Equipment**Eye / Face Protection**

Use appropriate safety glasses.

Skin Protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body Protection

Wear appropriate protective clothing.

Respiratory Protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance	Yellow crystalline granules	Vapor Pressure	No data available.
Odor	Odorless	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
pH	No data available	Solubility(ies)	No data available.
Melting / Freezing Point	No data available.	Partition Coefficient	No data available.
Boiling Point / Range	No data available.	Autoignition Temperature	No data available.
Flash Point	No data available.	Decomposition Temperature	200-218 °C
Evaporation Rate	No data available.	Viscosity	No data available.
Flammability (Solid, Gas)	No data available.	Explosive Properties	No data available.
Upper / Lower Flammability or Explosive	No data available.	Oxidizing Properties	No data available.

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY**10.1 Reactivity**

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditionsto avoid

Excessive heat. Heating in air. Dust Formation

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide. Sodium oxides.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects Acute Toxicity**

Classified based on available data

Skin Corrosion / Irritation

Classified based on available data

Serious Eye Damage / Irritation

Classified based on available data

Respiratory or Skin Sensitization

Classified based on available data

Germ Cell Mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive Toxicity

Classified based on available data

Specific Target Organ Toxicity - Single Exposure

Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure

Classified based on available data

Aspiration Hazard

Classified based on available data

Symptoms/ Routes of Exposure

Inhalation: May be irritating to the respiratory tract.
Ingestion: Specific test data for the substance or mixture is not available.
Skin: Specific test data for the substance or mixture is not available.
Eyes: Specific test data for the substance or mixture is not available.
Delayed / Immediate Effects: No known symptoms.

Additional Information

Classified based on available data

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

Inherently biodegradable..

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Wastetreatmentmethods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

Contaminated Packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 UNNumber

Does not meet the criteria for classification as hazardous for transport.

14.2 UN proper shipping name

Does not meet the criteria for classification as hazardous for transport.

14.3 Transport hazard class(es)

Does not meet the criteria for classification as hazardous for transport.

14.4 Packaging group

Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards

Does not meet the criteria for classification as hazardous for transport.

14.6 Special precautions for users

Does not meet the criteria for classification as hazardous for transport.

14.7 Additional Transport Information

Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 and 29 CFR 1910.1200 [OSHA]

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

TSCA (Toxic Substances Control Act) : Listed

SARA 313 : Listed

SARA 311/312 : Listed

CERCLA Reportable Quantity : None.

California Proposition 65 : Not applicable.

15.2 **Chemical safety assessment**

A Chemical Safety Assessment has not been made for this product.

16. **OTHER INFORMATION**

Further Information

Copyright© 2024 ACD, a Bio-Techne Brand

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifiers

Product Name: RNAscope™ HiPlex Pro Imaging Buffer Part B
 Product Number: 322087

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: For research use only. Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Company:	Advanced Cell Diagnostics	Telephone:	1-510-576-8800
	7707 Gateway Blvd	Fax:	1-510-576-8798
	Newark, CA, 94560, USA	Internet:	www.acdbio.com
		Email address:	info.acd@bio-technne.com

1.4 Emergency Telephone Number

For chemical emergency, spill, leak, fire, exposure, or accident call CHEMTREC day or night: Within U.S. 1-800-424-9300 Worldwide 1-703-527-3887
 Bio-Techne Tel: US: 612-379-2956 or 800-343-7475 / Europe: +44(0)1235-529449 / China 86-400-821-3475

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].

Skin Irritation - Category 2

Eye Irritation - Category 2A

STOT Single Exposure - Category 3

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA].

Pictogram(s):



Signal word: Warning

Hazard Statement(s):

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Statement(s):

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
P264+P265	Wash hands thoroughly after handling. Do not touch eyes.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P332+P317	If skin irritation occurs: Get medical help.
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P403+P233	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

2.3 Other Hazards - None

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Sodium Chloride	7647-14-5	231-598-3	-	-	50-55%
2-amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	1185-53-1	214-684-5	-	-	30-40%
Trometamol	77-86-1	201-064-4	-	H315, H319, H335	5-20%

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathing stops, give artificial respiration. Consult a doctor.

In Case of Skin Contact

Immediately wash skin with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes and wash before reuse. Consult a doctor.

In Case of Eye Contact

Flush with copious amounts of water for at least 15 minutes. Consult a doctor.

If Swallowed

Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Consult a doctor.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

4.3 Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon Oxides, Nitrogen Oxides, Halogenated Compounds, metal Oxides, Hydrogen Chloride Gas

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Do not take action without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as described under section 13 of SDS.

6.4 Reference to other sections

For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container tightly sealed until ready for use.

7.3 Specific end uses

Not applicable.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

82 Exposure controls**Appropriate Engineering Controls**

Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal Protective Equipment**Eye / Face Protection**

Use appropriate safety glasses.

Skin Protection

Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body Protection

Wear appropriate protective clothing.

Respiratory Protection

If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance	Clear liquid	Vapor Pressure	No data available.
Odor	Little to none	Vapor Density	No data available.
Odor Threshold	No data available.	Relative Density	No data available.
pH	7.4	Solubility(ies)	No data available.
Melting / Freezing Point	No data available.	Partition Coefficient	No data available.
Boiling Point / Range	No data available.	Autoignition Temperature	No data available.
Flash Point	No data available.	Decomposition Temperature	No data available.
Evaporation Rate	No data available.	Viscosity	No data available.
Flammability (Solid, Gas)	No data available.	Explosive Properties	No data available.
Upper / Lower Flammability or Explosive	No data available.	Oxidizing Properties	No data available.

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY**10.1 Reactivity**

Stable under recommended transport or storage conditions.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4 Conditions to avoid

Heat, moisture.

10.5 Incompatible materials

Strong acids/alkalis, strong oxidizers/reducing agent.

10.6 Hazardous decomposition products

Strong acids/alkalis, strong oxidizers/reducing agent.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects Acute Toxicity**

Classified based on available data

Skin Corrosion / Irritation

Classified based on available data

Serious Eye Damage / Irritation

Classified based on available data

Respiratory or Skin Sensitization

Classified based on available data

Germ Cell Mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive Toxicity

Classified based on available data

Specific Target Organ Toxicity - Single Exposure

Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure

Classified based on available data

Aspiration Hazard

Classified based on available data

Symptoms / Routes of Exposure

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: May cause gastrointestinal upset.

Skin: May irritate the skin.

Eyes: There may be irritation and redness.

Delayed / Immediate Effects: No known symptoms

Additional Information

No known symptoms.

Classified based on available data

12. ECOLOGICAL INFORMATION

121 Toxicity

No data available

122 Persistence and degradability

No data available.

123 Bioaccumulative potential

No data available.

124 Mobility in soil

No data available.

125 Results of PBT and vPvB assessment

No data available.

126 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1 Wastetreatment methods

Product

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

Contaminated Packaging

Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 UNNumber

Does not meet the criteria for classification as hazardous for transport.

14.2 UN proper shipping name

Does not meet the criteria for classification as hazardous for transport.

14.3 Transport hazard class(es)

Does not meet the criteria for classification as hazardous for transport.

14.4 Packaging group

Does not meet the criteria for classification as hazardous for transport.

14.5 Environmental hazards

Does not meet the criteria for classification as hazardous for transport.

14.6 Special precautions for users

Does not meet the criteria for classification as hazardous for transport.

14.7 Additional Transport Information

Does not meet the criteria for classification as hazardous for transport.

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 and 29 CFR 1910.1200 [OSHA]

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

TSCA (Toxic Substances Control Act) : Listed

SARA 313 : Listed

SARA 311/312 : Listed

CERCLA Reportable Quantity : None.

California Proposition 65 : Not applicable.

15.2 **Chemical safety assessment**

A Chemical Safety Assessment has not been made for this product.

16. **OTHER INFORMATION**

Further Information

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End of safety data sheet