

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-techne.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
Fax: 1-510-576-8798
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-Technne 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].

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

- 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 | 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
7707 Gateway Blvd
Newark, CA, 94560, USA

Telephone: 1-510-576-8800
Fax: 1-510-576-8798
Internet: www.acdbio.com
Email address: info.acd@bio-techne.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

91	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.
92	Other safety information			
	No data available.			

10. STABILITY AND REACTIVITY

101	Reactivity
	Stable under recommended transport or storage conditions.
102	Chemical stability
	Stable under recommended storage conditions.
103	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.
104	Conditionsto avoid
	Heat, moisture.
105	Incompatible materials
	Strong acids/alkalis, strong oxidizers/reducing agent.
106	Hazardous decomposition products
	Strong acids/alkalis, strong oxidizers/reducing agent.

11. TOXICOLOGICAL INFORMATION

111	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

131 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.

141 UN-Number

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

142 UN proper shipping name

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

143 Transport hazard class(es)

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

144 Packaging group

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

145 Environmental hazards

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

146 Special precautions for users

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

147 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]

151 **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.

152 **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