

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

JL		meanion of the sebstan		
1.1	Product Identifie	er		
	Product Name	RNAscope® VS Duplex AMP 1		
	Product No	323311		
1.2	Relevant identif	ied uses of the substance or mix	ture and uses ad	lvised against
	Identified uses	For Research Use Only. Not for use in diagnostic procedures.		
1.3	Details of the su	pplier 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	Internet:	www.acdbio.com
			Email address:	info.acd@bio-techne.com
	Canada:	21 Canmotor Avenue	Telephone:	+1 855-668-8722
		Toronto, Ontario M8Z4E6	Fax:	+1 905-827-6402
		Canada	Email address:	Canada.inquiries@bio-techne.com
		10 P. d	Talashasa	44 (0)1005 500440
	United Kingdom:	19 Barton Lane	Telephone:	+44 (0)1235 529449
		Abingdon Science Park	Fax:	+44 (0)1235 533420
		Abingdon, OX14 3NB	Email address:	info.emea@bio-techne.com
	China	1193 Changning Road	Telephone:	+86 400-821-3475
	Cimiu	Unit 1901, Raffles Changning	Fax:	+76 (021)52371001
		0 0	Email address:	techsupport.cn@bio-techne.com
		Shanghai, China	Eman address:	techsupport.ch@bio-techne.com

1.4 Emergency Telephone Number

Emergency Tel: 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: +1 612-379-2956 or +1 800-343-7475 / Europe: +44 (0)1235-529449 / China +86 400-821-3475

SECTION 2: HAZARDS IDENTIFICATION

2.1 **Classification of the substance or mixture**

Classification in accordance with (EC) 1272/2008 [GHS/CLP], (EU) 2020/878, 29 CFR 1910.1200 [OSHA] Carcinogen – Category 2 Reproductive Toxicity – Category 1B STOT RE – Category 2

2.2 Label elements

Label in Accordance with (EC) 1272/2008 [GHS/CLP]



Signal word:DangerStatement(s):Hazard Statement(s)H351Suspected of causing cancer.H360May damage fertility or the unborn child.H373May cause damage to liver, kidney, and blood.Precautionary Statement(s):P201Obtain special instructions before use.P202De net handle until all safety precautions have here read

P202 Do not handle until all safety precautions have been read and understood.

CONFIDENTIAL & PROPRIETARY ADVANCED CELL DIAGNOSTICS

SDS 323311/Rev D/Effective 2023-08-04

RNAscope® VS Duplex AMP 1

P281	Use personal	protective	equipment	as required.
		r · · · · · ·	- 1· F · · ·	

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

EC No.: 200-842-0

3.1 Mixtures

Formamide

≤50%

SECTION 4: FIRST AID AND MEASURES

4.1 Description of first aid measures

General Advice

CAS-No: 75-12-7

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. Remove contact lenses if easy to do so. 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.

Inhalation

Vapors may be irritating to the eyes and the respiratory tract.

Skin

May cause skin irritation. Eyes Will cause eye discomfort and redness. Ingestion

Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

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.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use large quantities of water applied as a mist or spray. Solid streams of water may be ineffective. Cool affected containers with flooding quantities of water.

5.2 Special hazards arising from the substance or mixture. Hazardous combustion products

Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

5.3 Advice for fire fighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 **Personal precautions, protective equipment, and emergency procedures**

RNAscope® VS Duplex AMP 1

Do not act without suitable protective clothing - see section 8 of SDS. Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing vapors, mist, dust, or gas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

- 6.2 **Environmental Precautions** Do not let product enter drains.
- 6.3 Methods and material 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.

SECTION 7: HANDLING AND STORAGE

7.1 **Precautions for safe handling**

Avoid inhalation, contact with eyes, skin and clothing. Use in a well-ventilated area. Do not eat, drink, or smoke in laboratory areas. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

7.2 Conditions for safe storage, including any incompatibilities.

Store in cool, well-ventilated area. Store locked up. Containers, which are opened, must be carefully resealed and kept upright to prevent leakage. Keep away from heat, sparks, flame, and other sources of ignition.

7.3 Specific end user(s)

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

ACGIH TLV TWA – 10 ppm OSHA PEL TWA – 20 ppm

8.2 Exposure controls Protective equipment



Engineering measures

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. Prevent dispersion of dust. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product.

Respiratory Equipment

If risk assessment indicates necessary, use a suitable respirator.

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.

Eye Protection

Use approved safety goggles or face shield.

Body Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor 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 reomve any clothing that becomes contaminated. When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear liquid	Vapor Pressure	No data available
Odor	Ammonia like	Vapor Density	No data available
Odor Threshold	No data available	Relative Density	No data available
pН	4-5	Solubility	No data available

CONFIDENTIAL & PROPRIETARY ADVANCED CELL DIAGNOSTICS

SDS 323311/Rev D/Effective 2023-08-04

RNAscope® VS Duplex AMP 1

Melting / Freezing Point Boiling Point / Range Flash Point Evaporation Rate Flammability (Solid, Gas) Upper/Lower Flammability or Explosive Limits No data available 210 °C 175 °C No data available No data available No data available Partition Coefficient Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties No data available No data available No data available No data available No data available

No data available

9.2 **Other information** No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

- 10.3 Possibility of hazardous reactions
 - No data available.

10.4 **Conditions to avoid.** Heat, flames, sparks

10.5 Incompatible Materials

Strong oxidizing substances. Strong reducing agents.

10.6 Hazardous decomposition products

Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen cyanide, ammonia.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Toxicity	y .			
LD50 Oral (rat	t) – 5577 mg/kg			
	on (rat) - >3900 ppm.			
Skin Corrosio	n / Irritation			
May cause ski	n irritation and/or dermatitis.			
Serious Eye D	amage / Irritation			
Will cause eye	discomfort, redness, and tearing of the eye.			
	r Skin Sensitization			
May be irritati	ng to the respiratory tract.			
Germ Cell Mu	atagenicity			
Classified base	ed on available data.			
Carcinogenici	ty			
Possible cance	r hazard. May cause cancer based on animal data	a.		
Reproductive	Toxicity			
May cause ha	rm to the unborn child. Developmental effects ha	we occurred in experimental animals.		
Specific Targe	et Organ Toxicity - Single Exposure			
Classified base	ed on available data.			
Specific Targe	et Organ Toxicity - Repeated Exposure			
Liver, kidney,	blood.			
Aspiration Ha	zard			
Classified base	ed on available data.			
Symptoms / R	outes of Exposure			
Inhalation:	May cause respiratory tract irritation.			
Ingestion:	Harmful if swallowed.			
Skin:	May be harmful if absorbed through skin.	May cause skin irritation.		
Eyes:	Causes serious eye irritation.			
Delayed/Imme	Delayed/Immediate Effects:			
To the best of	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly			
investigated.				
Additional In	formation			
CONFIDENTIAL & PROPI	RIETARY ADVANCED CELL DIAGNOSTICS	SDS 323311/Rev D/Effective 2023-08-04		

Classified based on available data.

Classified based on available data.
SECTION 12: ECOLOGICAL INFORMATION
12.1 Toxicity
LC50 – 9135 mg/L, 96h (brachydanio rerio)
12.2 Persistence and degradability
No data available
12.3 Bio accumulative potential
No data available
12.4 Mobility in soil
No data available
12.5 Results of PBT and vPvB assessment
No data available.
12.6 Endocrine disrupting properties
No data available 12.7 Other adverse effects
No data available
SECTION 13: DISPOSAL CONSIDERATIONS
13.1 Waste treatment 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.
SECTION 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 UN Number
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 user
Does not meet the criteria for classification as hazardous for transport.
14.7 Maritime transport in bulk according to IMO instruments
Not applicable. SECTION 15: REGULATORY INFORMATION
This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
TSCA (Toxic Substances Control Act): Not applicable
SARA 313: Not applicable
SARA 311/312: Not applicable.
CERCLA Reportable Quantity: Not applicable.
California Proposition 65: Not applicable.
California Proposition 65: Not applicable. 15.2 Chemical safety assessment
California Proposition 65: Not applicable.

SECTION 16: OTHER INFORMATION

Further Information

Copyright © 2023 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