SAFETY DATA SHEET

RNAscope™ Multiomic Antibody Diluent

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™ Multiomic Antibody Diluent
Product No	323436

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	Internet:	www.acdbio.com
		Email address:	info.acd@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) No 1272/2008 [GHS/CLP], (EU) 878/2020, 29 CFR 1910.1200 [OSHA]

H316 - Mild Skin Irritation – (Category 3)

H320 - Causes Eye Irritation (Category 2B)

H302 – Harmful if Swallowed (Category 4)

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Signal Word: Warning

Statement(s):

Hazard Statement(s)

H316	Causes mild skin irritation.
H320	Causes eye irritation.
H302	Harmful if swallowed.

Precautionary Statement(s):

P264	Wash hands thoroughly after handling.
P265	Do not touch eyes.
P280	Wear protective gloves/eye protection/face protection.
P270	Do not eat, drink or smoke when using this product.
P301+P317	If SWALLOWED: Get medical help.

P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P317	If eye irritation persists: Get medical help.
P332+P317	If skin irritation occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Mixtures**

Chemical Name	CAS#	Concentration (w/w)
EDTA	60-00-4	< 5%

SECTION 4: FIRST AID AND 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. 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

May cause eye irritation.

Ingestion

Rinse mouth with water. Seek medical attention.

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**

Suitable 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**

Thermal decomposition can lead to the 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**

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. 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 drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

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, flames, and other sources of ignition.

7.3 **Specific end user(s)**

Not applicable.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 **Control Parameters**

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 **Exposure controls**

Protective equipment

Engineering measures

Ensure all engineering measures described under section 7 of SDS are in place. Ensure the laboratory is equipped with a safety shower and eye wash station. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling product.

Eye/Face Protection

Use appropriate safety glasses.

Hand 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

None necessary.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 **Information on basic physical and chemical properties**

Appearance	Clear liquid	**Vapor Pressure**	No data available
Odor	No data available	**Vapor Density**	No data available
Odor Threshold	No data available.	**Relative Density**	No data available
pH	No data available	**Solubility**	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 Limits	No data available	**Oxidizing Properties**	No data available

9.2 **Other information**

Not available

SECTION 10: STABILITY AND REACTIVITY

10.1 **Reactivity**

Stable under normal conditions.

10.2 **Chemical stability**

Stable under recommended storage conditions.

10.3 **Possibility of hazardous reactions**

No data available

10.4 **Conditions to avoid**

Heat, flames, sparks.

10.5 **Incompatible Materials**

Copper, Copper alloys, Nickel

10.6 **Hazardous decomposition products**

Nitrogen oxides. Carbon monoxide. Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 **Information on toxicological effects**

Acute Toxicity

Classified based on available data.

Skin Corrosion/Irritation

May cause skin irritation.

Serious Eye Damage/Irritation

May cause eye irritation.

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 cause respiratory tract irritation.
Ingestion: Harmful if swallowed.
Skin: May cause skin irritation.
Eye: Causes serious eye irritation.

Delayed/Immediate Effects

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

Additional Information

Classified based on available data.

SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity**

Aquatic toxicity (acute)

Not applicable

Aquatic toxicity (chronic)

Not applicable

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**

Transfer to a suitable container and arrange for collection by a 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

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

Environmental Listing

SARA 313: Not applicable

SARA 311/312: Acute Health Hazard.

CERCLA Reportable Quantity: Not applicable.

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Taiwan (TCSI), Japan (ISHL), New Zealand (NZIoC), Japan (ISHL). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
EDTA	60-00-4	200-449-4			X	X	X	X	X
Triton X-100 (4-1,1,3,3-Tetramethylbutyl) phenol	9002-93-1				**X**	**X**	KE-33568	**X**	**X**

Component	CAS No	TSCA	TSCA Inventory notification Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Triton X-100 (4-1,1,3,3-Tetramethylbutyl) phenol	9002-93-1	X		X		X	X	X
EDTA	60-00-4	X		X	-	X	X	X

Legend: X - Listed '-' - Not Listed **KECL** - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorizations/Restrictions according to EU REACH

Component	CAS No	REACH (1907/2006) Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Triton X-100 (41,1,3,3-Tetramethylbutyl) phenol	9002-93-1	Endocrine disrupting properties (Article 57(f) environment) Application date: July 4, 2019 Sunset date: January 4, 2021 Exemption - extended latest application and sunset date for the research, development and production of medicinal products or medical devices in view of their use for the diagnosis, treatment or prevention of the coronavirus disease (COVID-19)	-	SVHC Candidate list - Equivalent level of concern having probable serious effects to the environment (Article 57f - environment)

Authorization/Restrictions according to EU REACH

After the sunset date the use of this substance requires either an authorization or can only be used for exempted uses, e.g. use in scientific research and development which includes routine analytics or use as intermediate.

REACH links

https://echa.europa.eu/authorisation-list

https://echa.europa.eu/candidate-list-table

15.2 **Chemical Safety Assessment**

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

SECTION 16: OTHER INFORMATION

Further Information

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