SAFETY DATA SHEET

RNAscope® 2.5 LS Hydrogen Peroxide

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® 2.5 LS Hydrogen Peroxide
Product No	322101

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	Telephone Fax: Internet: Email address:	+1 510-576-8800 +1 510-576-8798 www.acdbio.com info.acd@bio-techne.com
Canada:	21 Canmotor Avenue Toronto, Ontario M8Z4E6 Canada	Telephone: Fax: Email address:	+1 855-668-8722 +1 905-827-6402 Canada.inquiries@bio-techne.com
United Kingdom:	19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB	Telephone: Fax: Email address:	+44 (0)1235 529449 +44 (0)1235 533420 info.emea@bio-techne.com
China	1193 Changning Road Unit 1901, Raffles Changning Shanghai, China	Telephone: Fax: Email address:	+86 400-821-3475 +76 (021)52371001 techsupport.cn@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]

Skin Irritation – Category 2

Eye Damage – Category 1

2.2 Label elements

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

Pictogram(s):

Signal Word: Danger

Statement(s):

Hazard Statement(s)

H315	Causes skin irritation.
H318	Causes serious eye damage.

Precautionary Statement(s):

P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
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.

P332+P313	If skin irritation occurs: Get medical advice/attention.
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**

HYDROGEN PEROXIDE SOLUTION…%	≤ 5 %
CAS-No: 7722-84-1 EC No.: 231-765-0	

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 serious eye damage.

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**

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 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 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 – 1 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.

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

If risk assessment indicates necessary, use a suitable respirator.

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**

Brass, copper, powdered metals, iron and iron salts, combustible materials.

10.6 **Hazardous decomposition products**

No data available.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 **Information on toxicological effects**

Acute Toxicity

Classified based on available data.

Skin Corrosion/Irritation

May cause skin irritation and/or dermatitis.

Serious Eye Damage/Irritation

Will cause eye discomfort, redness, and tearing of the eye.

Respiratory or Skin Sensitization

May be irritating to the respiratory tract.

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 be harmful if absorbed through skin. May cause skin irritation.
Eyes:	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**

No data available

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 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

TSCA (Toxic Substances Control Act): Not applicable

SARA 313: Not applicable

SARA 311/312: Acute Health Hazard.

CERCLA Reportable Quantity: Not applicable.

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