

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

**1.1 Product Identifiers**

Product Name: RNAscope™ HiPlex Pro AMP 1

Product Number: 322074

**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](http://www.acdbio.com)  
Email address: [info.acd@bio-techne.com](mailto: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].

Carcinogenicity – Category 2

Reproductive Toxicity – Category 1B

Specific target organ toxicity, repeated exposure - Category 2

**2.2 Label Elements**

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

Pictogram(s):



Signal word: **DANGER**.

**Hazard Statement(s):**

H351 Suspected of causing cancer

H360 May damage fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

**Precautionary Statement(s):**

P203 Obtain, read and follow all safety instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection

P318 If exposed or concerned, get medical advice.

P319 Get medical help if you feel unwell.

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.
Formamide	75-12-7	200-842-0	616-052-00-8	H351,H360, H373	≤30%

---

### 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

In combustion, may emit toxic fumes. Keep product and empty container away from heat and sources of ignition

#### 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

Formamide 75-12-17

TWA 10 ppm ACGIH

TWA 10 ppm 15 mg/m<sup>3</sup> NIOSH REL

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**

<b>Appearance</b>	Clear liquid	<b>Vapor Pressure</b>	No data available.
<b>Odor</b>	Ammonia like	<b>Vapor Density</b>	No data available.
<b>Odor Threshold</b>	No data available.	<b>Relative Density</b>	No data available.
<b>pH</b>	4-5	<b>Solubility(ies)</b>	No data available.
<b>Melting / Freezing Point</b>	No data available.	<b>Partition Coefficient</b>	No data available.
<b>Boiling Point / Range</b>	210 C	<b>Autoignition Temperature</b>	No data available.
<b>Flash Point</b>	175 C	<b>Decomposition Temperature</b>	No data available.
<b>Evaporation Rate</b>	No data available.	<b>Viscosity</b>	No data available.
<b>Flammability (Solid, Gas)</b>	No data available.	<b>Explosive Properties</b>	No data available.
<b>Upper / Lower Flammability or Explosive</b>	No data available.	<b>Oxidizing Properties</b>	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, flames, sparks, moisture.

10.5 **Incompatible materials**

Strong oxidizing agents. Strong reducing agents.

10.6 **Hazardous decomposition products**

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

---

11. **TOXICOLOGICAL INFORMATION**

11.1 **Information on toxicological effects Acute Toxicity**

LD50 Oral (rat) – 5577 mg/kg LC50

Inhalation (rat) - >3900 ppm.

**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**

LC50 – 9135 mg/L, 96 h (brachydanio rerio).

**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**

**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