



**EXPRESS BIOTECH INTERNATIONAL  
(XpressBio)**

## Safety Data Sheet

For all research reagents manufactured by XpressBio with catalog number RT-1000

Effective date: December 2020

Revision A

## 1-Product and Company Identification

**Product Name:** HIV-1 Reverse Transcriptase Assay  
**Company Name:** Express Biotech International (XpressBio)  
**Address:** 4650 Wedgewood Blvd, Suite 103  
Frederick, MD 21703, USA  
**Phone number:** (301) 228-2444  
**Fax number:** (301) 560-6570  
**Emergency phone number:** Contact national poison control in your state or country.  
**Recommended Use:** For research use only. Not for diagnostic use.

## 2-Hazard(s) Identification

### MOST IMPORTANT HAZARDS:

#### Sodium Azide

#### Hazard Classification:

Acute Tox. 2  
Aquatic Acute 1  
Aquatic Chronic 1

#### Signal Word:

Danger, Warning

#### Hazard Statements:

H300: Fatal if swallowed [Danger Acute toxicity, oral]  
H400: Very toxic to aquatic life [Warning Hazardous to the aquatic environment, acute hazard]  
H410: Very toxic to aquatic life with long lasting effects [Warning Hazardous to the aquatic environment, long-term hazard]

#### Pictogram:



#### Precautionary Statements:

P264: Wash ... thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P273: Avoid release to the environment.  
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P321: Specific treatment (see ... on this label).  
P330: Rinse mouth.  
P391: Collect spillage.  
P405: Store locked up.  
P501: Dispose of contents/container to approved waste disposal.

#### Other Hazards:

None



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### 3-Composition/Information on Ingredients

#### Components with materials contributing to the hazard:

Sodium Azide

| Chemical     | Concentration | CAS Number | EC Number |
|--------------|---------------|------------|-----------|
| Sodium Azide | 20%           | 26628-22-8 | 247-852-1 |

#### Components considered non-hazardous at their given concentrations:

ABTS Peroxidase Substrate

| Chemical  | Concentration | CAS Number | EC Number |
|---|---------------|------------|-----------|
| 2,2' -Azino-bis-(3-ethyl-benzothiazoline-6-sulfonic acid (ABTS™)) | 99-100%       | 30931-67-0 | 250-396-6 |

Lysis Buffer

| Chemical | Concentration | CAS Number | EC Number |
|----------|---------------|------------|-----------|
| Triton X | 0.5%          | 9002-93-1  | 618-344-0 |

Wash Buffer

| Chemical | Concentration | CAS Number | EC Number |
|----------|---------------|------------|-----------|
| Tween 20 | 1.0%          | 9005-65-6  | 500-019-9 |

### 4-First-Aid Measures

The following general first aid measures apply to this product:

#### Inhalation:

Immediately remove the patient/victim from the source of exposure. Evaluate respiratory function and pulse. Ensure that the patient/victim has an unobstructed airway. If shortness of breath occurs or breathing is difficult (dyspnea), administer oxygen. Assist ventilation as required. Always use a barrier or bag-valve-mask device. If breathing has ceased (apnea), provide artificial respiration.

Seek medical attention immediately.

#### Skin contact:

Immediately remove the patient/victim from the source of exposure. See the Decontamination section for patient/victim decontamination procedures.

Seek medical attention immediately.


#### Eye contact:

Immediately remove the patient/victim from the source of exposure. Immediately wash eyes with large amounts of tepid water for at least 15 minutes.

Seek medical attention immediately.

#### Ingestion:

Immediately remove the patient/victim from the source of exposure.

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Ensure that the patient/victim has an unobstructed airway.  
Do not induce vomiting (emesis).  
Monitor heart function, and evaluate for low blood pressure (hypotension), abnormal heart rhythms (dysrhythmias), and reduced respiratory function (respiratory depression).  
Evaluate for low blood sugar (hypoglycemia), electrolyte disturbances, and low oxygen levels (hypoxia).  
Begin intravenous (IV) fluid administration; adjust the rate of fluid administration as necessary in order to maintain blood pressure.  
Vomitus from patient/victims exposed to sodium azide can pose a risk of exposure to toxic hydrazoic acid gas. If the patient/victim vomits, clean up and isolate vomited material using paper towels and plastic bags.  
Seek medical attention immediately.

**Most important symptoms:**  
The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

**Immediate medical attention and special treatment:**  
No data available.

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## 5-Fire-fighting measures

**Extinguishing media:**

**Suitable extinguishing media:** Dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

**Unsuitable extinguishing media:** No data available.

**Specific hazards:**

Run-off from fire control or dilution water may be corrosive and/or toxic, and it may cause pollution. If the situation allows, control and properly dispose of run-off (effluent).

**Specific methods of firefighting:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face-piece operated in the pressure demand or other positive pressure mode.

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## 6-Accidental Release Measures

**Personal precautions and protective equipment:**

Ensure adequate ventilation. Avoid breathing vapors, mist or gas. Use recommended Personal Protective Equipment. See section 8 for additional information.

**Emergency procedures:**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Methods and materials for containment and cleanup:**

Do NOT let this chemical enter the environment. Sweep spilled substance into covered plastic containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations.

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**Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

## 7-Handling and Storage

**Precautions for safe handling:**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage, including incompatibilities:**

Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids.

## 8-Exposure Control / Personal Protection

**Occupational exposure limits:**

There are no established exposure limits for this product. However, the following exposure limits exist for the following hazardous ingredients:

| Ingredients: | OSHA PEL                         | ACGIH TLV              | Other              |
|--------------|----------------------------------|------------------------|--------------------|
| Sodium Azide | 0.1 ppm (0.3 mg/m <sup>3</sup> ) | 0.29 mg/m <sup>3</sup> | 0.3 mg/cu m (STEL) |

**Engineering controls:**

Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment:**

**Eye and Face Protection:**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

**Respiratory protection:**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Skin and body protection:**

Handle with gloves. Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures:**

Wash hands immediately after handling materials (especially before eating, drinking or smoking). Decontaminate or discard protective equipment after each use.

**Remove personal protective equipment when leaving work area.**



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## 9-Physical and Chemical Properties

Information for physical and chemical properties –

**Appearance:** Liquid

**Upper/lower flammability or explosive limits:** No data available

**Odor:** No data available

**Vapor pressure:** No data available

**Odor threshold:** No data available

**Vapor density:** No data available

**pH:** 6.0 - 8.0 at 25 °C

**Relative density:** No data available

**Melting point/freezing point:** No data available

**Solubility(ies):** No data available

**Initial boiling point and boiling range:** No data available

**Flash point:** No data available

**Evaporation rate:** No data available

**Flammability:** No data available

**Partition coefficient: n-octanol/water:** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

## 10-Stability and Reactivity

**Reactivity:**

No known reactivity.

**Chemical stability:**

Stable under normal use and conditions.

**Hazardous reactions:**

No known hazardous reactions.

**Conditions to avoid:**

No information available.

**Incompatible materials:**

Heavy metals may form extremely explosive azides.

**Hazardous decomposition:**

No information available.

## 11-Toxicological information

Toxicological information is supplied for Sodium Azide only. Other components of the preparation are not supplied at levels or quantities currently thought to have toxicological effects.

Sodium Azide is present at 20% in solution.

**Inhalation:**

Sodium Azide: LC50 = 37 mg/m<sup>3</sup> (37 mg/kg) (Rat)

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**Skin (Irritancy and Acute Toxicity):**  
Sodium Azide: LD50=50 mg/kg (Rat)

**Eye (Irritancy and Acute Toxicity):**  
Sodium Azide: No data available.

**Ingestion:**  
Sodium Azide: LD50 = 27 mg/kg (Rat)

**Sensitisation:**  
Sodium Azide: No data available.

**Chronic toxicity or long-term toxicity:**  
Sodium Azide: No data available.

**Specific effects:**

**Carcinogenicity**  
Sodium Azide: None identified

**Mutagenicity**  
Sodium Azide: None identified

**Reproduction toxicity**  
Sodium Azide: None identified

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## 12-Ecological information

Sodium Azide:

This substance does enter the environment under normal use. Avoid any additional release, through inappropriate disposal.

Environmental toxicity-  
Aqueous sodium azide is readily hydrolyzed to yield hydrazoic acid. As a result, adsorption to suspended solids and sediment, bioconcentration, volatilization and biodegradation are not expected to be important fate processes in aquatic systems. Sodium azide is a reactive, polar compound that should not bioaccumulate.

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## 13-Disposal Considerations

Dispose of materials in this kit according to Federal, State and Local Requirements. Use proper technique and PPE (refer to Section 8) for disposal.

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## 14-Transport information

Classifications for land, air, and see transport:  
**UN number:** Not regulated.  
**UN shipping name:** Not regulated.

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**Transport hazard class:** Not regulated.

**Packing group:** Not regulated.

**Environmental hazards:** Not regulated.

**Bulk transport in accordance with Annex II of MARPOL 73/78:** Not regulated.

**Special user precautions:** Not regulated, no information available.

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## 15-Regulatory Information

### United States Regulatory Information

SARA 313: Not listed.

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## 16-Other Information

### Recommended use:

This product is for **Research Use Only**, not for diagnostic use.

**SDS Revision date:** December 8<sup>th</sup>, 2020

**Reason for revision:** Update sections format and information.

### Others:

The above information is based on data available to XpressBio and is believed to be correct. Since the information may be applied under conditions beyond the control of XpressBio and with which the company may be unfamiliar, XpressBio does not assume any responsibility for the results of its use and all persons receiving it shall make their own determination of the effects, properties, and protections, which pertain to their particular conditions.

No representation, warranty, or guarantee, express or implied (including a warranty of fitness or merchantability for a particular purpose), is made with respect to the material, the accuracy of this information, the results to be obtained from the use thereof, or the hazards connected with the use of the material. Caution should be used in the handling and use of the material.

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**End of Safety Data Sheet**