

# Safety Data Sheet

## Section 1. Product and Company Identification

**Trade Name** vamPure<sup>™</sup> Viral Nucleic Acid Extraction Kit  
**Catalog #** K5011820  
**Manufacturer** Biochain Institute, Inc.  
39600 Eureka Drive  
Newark, CA 94560  
USA  
510.783.8588 or 1.888.762.2568  
Email: [info@biochain.com](mailto:info@biochain.com)

**Emergency Phone #** Contact your local hazardous material control center.  
Call 911 in case of medical emergency.

## Section 2. Hazards Identification

### GHS Classification

Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 4), H332  
Specific Target organ systemic toxicity (single exposure)(Category 3), P301  
Skin irritation (Category 2), H315  
Serious eye damage (Category 1), H318  
Eye irritation (Category 2A), H319  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410

### GHS Label elements, including precautionary statements

#### Pictogram



*Signal word:* Warning

#### *Hazard statements*

H302 Harmful if Swallowed  
H314 Causes severe skin burns and eye damage.  
H315 May be harmful in contact with skin  
H318 Causes serious eye damage  
H332 Harmful if inhaled  
H335 May Cause respiratory irritation  
H401 Toxic to Aquatic Life.  
H412 Harmful to aquatic life with long lasting effects

#### *Precautionary statements*

P210 Keep away from heat/sparks/open flames/hot surfaces.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 Wash skin thoroughly after handling  
P271 Use only outdoors or in a well-ventilated areas  
P273 Avoid release to the environment.  
P280 Wear protective gloves/clothing and eye/face protection.  
P302 + P352: *If on skin:* Wash with plenty of soap and water.  
P304 + P340: *If inhaled:* Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305 + P351 + P338: *If in eyes:* Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/Physiscian if you feel unwell  
P332 + P313: If skin irritation occurs: Get medical advice/ attention.  
P337 + P313: If eye irritation persists: Get medical advice/ attention.

### **Section 3. Composition and Information on Ingredients**

This product contains the following components and mixture of the following substances with non-hazardous additions.

**GFC Buffer**

Contains 30-60% Guanidine Hydrochloride (CAS #: 50-01-1) and 10 -20% Triton X-100 (CAS #: 9002-93-1)

**BFC Buffer**

Contains 20-50% Guanidine Thiocyanate (CAS #: 593-84-0) and 0.1-1% N-lauroylsarcosine (CAS #: 137-16-6)

**Proteinase K**

Contains 1-5% Proteinase K (CAS #: 39450-01-6)

**Magnetic Bead Solution**

Contains 4.0% Silica Coated Magnetic nanoparticles, and 0.02% Sodium Azide (CAS #: 26628-22-8)

**FCW1 Buffer**

Contains 30-60% Guanidine Thiocyanate (CAS #: 593-84-0) and 10 -20% Triton X-100 (CAS #: 9002-93-1)

**FCW2 Buffer**

This buffer contains no substances which, at their given concentration, are considered to be hazardous

**FCE Buffer**

This buffer contains no substances which, at their given concentration, are considered to be hazardous

### **Section 4. First Aid Measures**

*Eye:* Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

*Skin:* Itching or burning of the skin. Immediately flush the skin with plenty of water while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

*Inhalation:* Remove exposed person from source of exposure to fresh air. If not breathing, clear airway and start cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

*Ingestion:* Get immediate medical attention. Do not induce vomiting unless directed by medical personnel.

### **Section 5. Fire Fighting Measures**

*Extinguishing media:* water spray, carbon dioxide, dry chemical powder or appropriate foam.

*Special firefighting procedures:* wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

*Unusual fire and explosion hazards:* emits toxic fumes under fire conditions.

### **Section 6. Accidental Release Measures**

Keep unnecessary people away; isolate hazard area and deny entry. Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal. Do not flush to sewer or waterways. Prevent release to the environment if possible.

### **Section 7. Handling and Storage**

Keep receptacles tightly sealed and store according to the instructions in the assay protocol.

### **Section 8. Exposure Controls/Personal Protection**

Follow standard laboratory safety procedures, including wearing chemical safety goggles, face shield, gloves, NIOSH approved respiratory protection and protective clothing. Wash and dry hands.

### **Section 9. Physical and Chemical Properties**

Refer to 3. Composition/Information On Ingredients.

### **Section 10. Stability and Reactivity**

*Thermal Decomposition:* no decomposition if used according to specifications. *Dangerous Products of Decomposition:* nitrogen and sulfur oxides. *Dangerous Reactions:* none.

### **Section 11. Toxicological Information**

The toxicological effects of this product have not been thoroughly studied. We recommend handling all chemicals with caution.

Triton X-100 - Oral LC50 rat: 1,800 mg/kg; Inhalation LC50: no data available; Dermal LD50 rabbit: 8,000 mg/kg. Other information on acute toxicity: no data available.

Hydrazine – Oral LD50 rat: 108-141 mg/kg; Inhalation rat: 4h 0.759 mg/L; Dermal: no data available. Corrosion/irritation rabbit: Corrosive; mild eye irritation - 24 h.

### **Section 12. Ecological Information**

Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

### **Section 13. Disposal Considerations**

Dispose in accordance with local, state or national regulations.

### **Section 14. Transport Information**

Proper Shipping Name: Assay Kits

DOT (US) - Not dangerous goods.

IMDG - Not dangerous goods.

IATA - Not dangerous goods.

*Additional Transport Information:* transport in accordance with local, state and national regulations.

### **Section 15. Regulatory Information**

*OSHA Hazards:* Target Organ Effect.

*SARA 311/312 Hazards:* Chronic Health Hazard.

### **Section 16. Other Information**

The information contained in this SDS was obtained from sources we believe are reliable. However, the above information is provided without warranty, expressed or implied, regarding its correctness. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.