

# Safety Data Sheet

## Glucose Assay Kit

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Trade Name:** Glucose Assay Kit  
**Item Number:** Z5030025  
**Manufacturer:** Biochain Institute, Inc.  
 39600 Eureka Drive  
 Newark, CA 94560. USA  
 Tel: 510-783-8588, Fax: 510-783-5386  
 Email: [info@biochain.com](mailto:info@biochain.com)

### 2. HAZARDS IDENTIFICATION

#### GHS Classification

Acute toxicity, Oral (Category 3)  
 Acute toxicity, Inhalation (Category 3)  
 Acute toxicity, Dermal (Category 5)  
 Skin irritation (Category 3)  
 Serious eye damage (Category 1)  
 Carcinogenicity (Category 1B)  
 Acute aquatic toxicity (Category 1)

#### GHS Label elements, including precautionary statements

##### Pictogram

**Signal word:** Danger

##### Hazard statements

H227: Combustible liquid  
 H301+H331: Toxic if swallowed  
 or if inhaled

H313: May be harmful in contact with skin.

H316: Causes mild skin irritation.

H318: Causes serious eye damage.

H350: May cause cancer.

H400: Very toxic to aquatic life damage.

##### Precautionary statements

P202: Do not handle until all safety precautions have been read and understood.

P280: Wear protective gloves/clothing and eye/face protection.

P281: Use personal protective equipment as required.

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.

P311: Call a poison center or doctor/physician.



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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

#### Reagent: 100 mL liquid.

Contains 1-7% o-toluidine (CAS #: 95-53-4), 40-95% acetic acid (CAS #: 64-19-7) and 0.1-0.25% thiourea (CAS #: 62-56-6).

#### Standard: 1 mL liquid.

### 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:** Nasal irritation, headache, dizziness, nausea, vomiting, heart palpitations, breathing difficulty, cyanosis, tremors, weakness, red flushing of face, irritability. 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.

### 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.

### 6. ACCIDENTAL RELEASE MEASURES

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Vapor protective clothing should be worn for spills and leaks. Shut off ignition sources; no flares, smoking or flames in hazard area. 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.

### 7. HANDLING AND STORAGE

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

### 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.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to 3. Composition/Information on Ingredients.

### 10. STABILITY AND REACTIVITY

**Thermal Decomposition:** no decomposition if used according to specifications.

**Dangerous Products of Decomposition:** nitrogen and sulfur oxides.

**Dangerous Reactions:** none.

### 11. TOXICOLOGICAL INFORMATION

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

o-Toluidine: Oral LD50 rat, 670 mg/kg; Inhalation LC50 rat 4h, 862 ppm; Dermal LD50 rabbit, 3,244 mg/kg.

Acetic acid: Oral LD50 rat, 3,310 mg/kg; Inhalation LC50 mouse 1h, 5,620 ppm; Dermal LD50 rabbit, 1,112 mg/kg.

Thiourea: Oral LD50 rat, 1,750 mg/kg; Inhalation LC50, no data available; Dermal LD50 rabbit, 2,800 mg/kg.

### 12. ECOLOGICAL INFORMATION

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

### 13. DISPOSAL INFORMATION

Dispose in accordance with local, state or national regulations.

### 14. TRANSPORT INFORMATION

Proper Shipping Name: Assay Kits

DOT (US): UN#: 2790; Class: 8; Packing group: III.

IMDG: UN#: 2790; Class: 8; Packing group: III.

Marine pollutant: Yes

IATA: UN#: 2790; Class: 8; Packing group: III.

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

### 15. REGULATORY INFORMATION

**OSHA Hazards:** Target Organ Effect, Corrosive, Carcinogen

**SARA 311/312 Hazards:** acute health hazard, chronic health hazard

### 16. OTHER INFORMATION

*The above information is believed to be accurate, but does not purport to be all inclusive and shall be used only as a guide. BioChain makes no warranty, express or implied, and assumes no responsibility as to the accuracy or suitability of such information or application to the User's intended purpose or for consequences of its use. The Users should make independent decisions regarding the completeness of information based on all sources available.*