

Revision Number: 1.0

Last updated 1<sup>st</sup> March 2017**1. PRODUCT AND COMPANY IDENTIFICATION**

Trade Name: ChromaDazzle Fumarate Assay Kit  
Item Number: BA0110  
Manufacturer: ReagentBio Ireland LTD, Dublin, Ireland  
Email: info@assaygenie.com

**2. HAZARDS IDENTIFICATION****GHS Classification**

Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319  
Germ cell mutagenicity (Category 2), H341  
Specific target organ toxicity (Category 3), Respiratory system, H335

**GHS Label elements, including precautionary statements****Pictogram**

Signal word: warning

**Hazard statements**

H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H341 Suspected of causing genetic defects.

**Precautionary statements**

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.  
P312 Call a doctor/ physician if you feel unwell.  
P332 + P313: If skin irritation occurs: Get medical advice/ attention.  
P337 + P313: If eye irritation persists: Get medical advice/ attention.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

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

**Assay Buffer: 10 mL liquid.**

Contains 0.5-5% Tris (CAS#: 77-86-1) and 0.1-2% L-glutamate (CAS#: 142-47-2).

**Enzyme A: 120 µL liquid.**

Contains 0.1-2% potassium phosphate (CAS#: 7758-11-4).

**Enzyme B: 120 µL liquid.**

Contains 0.1-2% potassium phosphate (CAS#: 7758-11-4).

**FMR Enzyme: 120 µL liquid.**

Contains 0.1-2% potassium phosphate (CAS #: 16788-57-1) and 20% glycerol (CAS #: 56-81-5).

**NAD/MTT: 1 mL liquid.**

Contains 1-10% Thiazolyl Blue Tetrazolium Bromide (CAS#: 298-93-1).

**Standard: 1 mL liquid.**

Contains 0.1-0.5% fumaric acid (CAS#: 110-17-8).

**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.

**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. 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.

Tris - Oral LC50 rat: > 3,000 mg/kg; Inhalation: no data available; LD50 Dermal rat: > 5,000 mg/kg; Skin corrosion/irritation: Skin rabbit, No skin irritation.

L-glutamate - LD50 Oral rat: 17.3 g/kg; Inhalation: no data available; LD50 Dermal rat: > 2,000 mg/kg; Skin corrosion/irritation rabbit: No skin irritation 4 h.

Thiazolyl Blue Tetrazolium Bromide (CAS#: 298-93-1) - Acute toxicity no data available; Inhalation: no data available; Dermal: no data available; no data available; Skin corrosion/irritation: no data available Serious eye damage/eye irritation; no data available.

L-Malic acid - Acute toxicity: no data available; Dermal: no data available; Skin corrosion/irritation: no data available; Serious eye damage/eye irritation: no data available.

Potassium phosphate - Oral: no data available; Inhalation: no data available; Dermal: no data available. Other information on acute toxicity: no data available.

**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) - Not dangerous goods.

IMDG - Not dangerous goods.

IATA - Not dangerous goods.

**15. REGULATORY INFORMATION**

OSHA Hazards: Target Organ Effect, Combustible Liquid.

SARA 311/312 Hazards: Fire 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. Assay Genie 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.*