



Material Safety Data Sheet (MSDS)  
Revision Date: 11-28-2022

**Kit Name:** VitroView™ RTU Mitochondrion Staining Solution  
**Catalog#:** VB-1003

**Components:**

VB-1003	RTU Mitochondrion Staining Solution
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## VB-1003 RTU Mitochondrion Staining Solution MSDS

### 1. Identification of the Substance/Mixture and Company

**Product Name** RTU Mitochondrion Staining Solution  
**Catalog#** VB-1003  
**Product Description** Component  
**Manufacturer/Supplier** VitroVivo Biotech, LLC. 405 E Gude Dr., Suite 214, Rockville, MD 20850  
**Tel/fax Number** Phone: 301-500-0499; Toll free: 1-800-260-9817 Fax: 844-248-6208

### 2. Hazards Identification

#### Classification of the substance or mixture

**Classification**  
**Physical hazards** Not Classified  
**Health hazards** Not Classified  
**Environmental hazards** Not Classified

#### Label elements

**Hazard statements** NC Not Classified

#### Other hazards

No information available.

### 3. Composition/information on ingredients

**Mixtures Description:** Mixture of the substances listed below.

#### **Composition:**

Component	CAS#
Rhodamine 123	62669-70-9

### 4. First Aid Measures

#### Description of first aid measures

**Inhalation** Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately.  
**Ingestion** Not relevant.  
**Skin contact** Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention promptly if symptoms occur after washing.  
**Eye contact** Rinse immediately with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

#### Most important symptoms and effects, both acute and delayed

**Inhalation** May cause coughing or mild irritation.  
**Ingestion** May cause discomfort if swallowed.  
**Skin contact** Prolonged skin contact may cause redness and irritation.  
**Eye contact** May cause temporary eye irritation.

#### Indication of any immediate medical attention and special treatment needed

**Notes for the doctor** No specific recommendations.

### 5. Firefighting Measures

#### Extinguishing media

**Suitable extinguishing media** Water spray, foam, dry powder or carbon dioxide.

**Special hazards arising from the substance or mixture**

**Specific hazards** Vapours/gases/fumes of: Hydrogen chloride (HCl). Oxides of the following substances: Carbon. Nitrogen.

**Advice for firefighters**

**Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

**6. Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust. Avoid contact with skin and eyes.

**Environmental precautions**

**Environmental precautions** Avoid the spillage or runoff entering drains, sewers or watercourses.

**Methods and material for containment and cleaning up**

**Methods for cleaning up** Collect spillage for reclamation or disposal in sealed containers via a licensed waste contractor.

**Reference to other sections**

**Reference to other sections** Wear protective clothing as described in Section 8 of this safety data sheet.

**7. Handling and Storage**

**Precautions for safe handling**

**Usage precautions** Do not handle broken packages without protective equipment.

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

**Storage precautions** Keep only in the original container. Store at specified temperature. Refer to product label.

**Storage class** Refer to product datasheet.

**Specific end use(s)**

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

**8. Exposure Controls/Personal Protection**

**Exposure controls**

**Protective equipment**

**Appropriate engineering controls** Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

**Eye/face protection** Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

**Hand protection** Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.
<b>Hygiene measures</b>	Provide eyewash station. Do not smoke in work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Wash promptly with soap and water if skin becomes contaminated.
<b>Respiratory protection</b>	No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Not determined.
<b>Odour</b>	No characteristic odour.
<b>Odour threshold</b>	No information available.
<b>pH</b>	Not determined.
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	No information available.
<b>Evaporation rate</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not determined.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not applicable.
<b>Relative density</b>	Not determined.
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	No unusual fire or explosion hazards noted.
<b>Oxidising properties</b>	Not determined.

**Other information** Other information None

## 10 Stability and Reactivity

### Reactivity

**Reactivity** There are no known reactivity hazards associated with this product.

### Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

### Possibility of hazardous reactions

**Possibility of hazardous reactions** Not determined.

### Conditions to avoid

**Conditions to avoid** Avoid exposure to high temperatures or direct sunlight.

**Incompatible materials Materials to avoid** Strong oxidising agents.

**Hazardous decomposition products** Not known.

## 11. Toxicological Information

### Information on toxicological effects

<b>Toxicological effects</b>	No information available.
<b>Skin corrosion/irritation</b>	
<b>Extreme pH</b>	
<b>Serious eye damage/irritation</b>	Not determined.
<b>Germ cell mutagenicity</b>	
<b>Genotoxicity - in vitro</b>	Not determined.
<b>Genotoxicity - in vivo</b>	Not determined.
<b>Carcinogenicity</b>	Not determined.
<b>Reproductive toxicity - fertility</b>	Not determined.
<b>Specific target organ toxicity - single exposure</b>	
<b>STOT - single exposure</b>	Not determined.
<b>Specific target organ toxicity - repeated exposure</b>	
<b>STOT - repeated exposure</b>	Not determined.
<b>Aspiration hazard</b>	Not determined.
<b>General information</b>	No specific health hazards known.
<b>Inhalation</b>	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Skin contact</b>	Liquid may irritate skin.
<b>Eye contact</b>	Vapour or spray in the eyes may cause irritation and smarting.
<b>Acute and chronic health hazards</b>	Because of the product's quantity and composition, the health hazard is regarded as low.
<b>Route of entry</b>	Skin and/or eye contact
<b>Medical symptoms</b>	No specific symptoms noted.

## 12. Ecological Information

### Toxicity

**Acute toxicity - fish** Not determined.

### Persistence and degradability

**Persistence and degradability** There are no data on the degradability of this product.

### Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** Not determined.

### Mobility in soil

**Mobility** The product is soluble in water.

### Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** No information available

### Other adverse effects

**Other adverse effects** Not determined.

## 13. Disposal Considerations

### Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

#### 14. Transport Information

<b>General</b>	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).
<b>Road transport notes</b>	Not classified.
<b>Rail transport notes</b>	Not classified.
<b>Sea transport notes</b>	Not classified.
<b>Air transport notes</b>	Not classified.
<b><u>UN number</u></b>	Not applicable.
<b><u>UN proper shipping name</u></b>	Not applicable.
<b><u>Transport hazard class(es)</u></b>	Not applicable.
<b><u>Packing group</u></b>	Not applicable.
<b><u>Environmental hazards</u></b>	
<b>Environmentally hazardous substance/marine pollutant</b>	No.
<b><u>Special precautions for user</u></b>	Not applicable.
<b><u>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</u></b>	
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

#### 15. Regulatory Information

##### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

<b>EU legislation</b>	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
<b>Guidance</b>	Workplace Exposure Limits EH40. Approved Classification and Labelling Guide (Sixth edition) L131. Safety Data Sheets for Substances and Preparations.
<b><u>Chemical safety assessment</u></b>	No chemical safety assessment has been carried out.

#### 16. Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Abbreviations and acronyms:

**ADR:** Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

**IMDG:** International Maritime Code for Dangerous Goods

**DOT:** US Department of Transportation

**IATA:** International Air Transport Association

**ACGIH:** American Conference of Governmental Industrial Hygienists

**NFPA:** National Fire Protection Association (USA)

**HMIS:** Hazardous Materials Identification System (USA)

**LC50:** Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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