

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Product Identifier

**Product Name** Ethidium Bromide Stock Solution

### Other means of identification

**Product Code(s)** A2510

**UN/ID no.** 2810

**Synonyms** No information available

**Product Use** For Laboratory Research Use Only.

### Supplier/Manufacturer

Biomatik Corporation  
9-140 McGovern Dr.  
Cambridge, Ontario N3H 4R7  
Canada

**Telephone Number** 1-519-489-7195

**E-mail Address** info@biomatik.com

**Emergency Telephone Number** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Germ cell mutagenicity

Category 2

### Label elements

#### **Emergency Overview**

#### **Warning**

#### **Hazard statements**

H341 - Suspected of causing genetic defects



**Appearance** Dark red haze-free

**Physical State** Liquid

**Odor** No information available

#### **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood  
Use personal protective equipment as required

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

Unknown Acute Toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
3,8-Diamino-1-ethyl-6-ph enylphenantridinium bromide	1239-45-8	214-984-6	1	Not applicable

**4. FIRST AID MEASURES**

**First Aid Measures**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

**Inhalation** Move to fresh air. If breathing becomes difficult, give oxygen. Consult a physician.

**Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth.

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

**Most Important Symptoms/Effects** No information available.

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

**Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** No information available.

**Specific Hazards Arising from the Chemical**

No information available.

**Hazardous Combustion  
Products** Emits toxic fumes.

**Explosion Data**

Sensitivity to Mechanical Impact None.  
Sensitivity to Static Discharge None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

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

**Personal protection** Ensure adequate ventilation, especially in confined areas.

**Environmental Precautions**

**Environmental Precautions** See Section 12 for additional Ecological information.

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

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Absorb with sand or vermiculite. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Handling** Handle in accordance with good industrial hygiene and safety practice.

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

**Storage** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Products** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
3,8-Diamino-1-ethyl-6-phenylphen- ntridinium bromide	-	-	-

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields. Avoid contact with eyes.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical State</b>	Liquid	<b>Odor</b>	No information available
<b>Appearance</b>	Dark red haze-free	<b>Odor Threshold</b>	No information available
<b>Color</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point/freezing point		
Boiling Point/Range	No information available	
Flash Point (High in °C)	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

### Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content	No information available
Density	No information available
Bulk Density	No information available

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical Stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon oxides. Nitrogen oxides (NOx). Hydrogen bromide.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

Inhalation	Harmful by inhalation.
Eye Contact	There is no data available for this product.
Skin Contact	There is no data available for this product.
Ingestion	Harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-

### Information on toxicological effects

**Symptoms** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.  
**Mutagenic Effects** No information available.  
**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-	-

**Reproductive Toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Chronic Toxicity** May cause heritable genetic damage.  
**Aspiration hazard** No information available.

### Numerical measures of toxicity - Product Information

**Unknown Acute Toxicity** 0 % of the mixture consists of ingredient(s) of unknown toxicity  
The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-

### Persistence and Degradability

No information available.

### Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-

**Other Adverse Effects** No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations.

**Contaminated Packaging** Dispose of in accordance with all federal, state and local regulations.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-	-

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-	-

Chemical Name	California Hazardous Waste Status
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-

### 14. TRANSPORT INFORMATION

#### DOT

**UN/ID no.** 2810  
**Proper shipping name** Toxic, liquid, organic, N.O.S. (contains Ethidium Bromide)  
**Hazard Class** 6.1  
**Packing Group** III

#### IATA

**UN/ID no.** 2810  
**Proper shipping name** Toxic, liquid, organic, N.O.S. (contains Ethidium Bromide)  
**Hazard Class** 6.1  
**Packing Group** III

### 15. REGULATORY INFORMATION

#### International Inventories

**TSCA** Does not comply  
**DSL/NDL** Does not comply  
**EINECS/ELINCS** Complies  
**ENCS** Does not Comply  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

#### Legend

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### **U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

<b>Component</b>	<b>SARA 313 - Threshold Values %</b>
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-

#### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

<b>Chemical Name</b>	<b>CWA - Reportable Quantities</b>	<b>CWA - Toxic Pollutants</b>	<b>CWA - Priority Pollutants</b>	<b>CWA - Hazardous Substances</b>
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-	-

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

<b>Chemical Name</b>	<b>Hazardous Substances RQs</b>	<b>Extremely Hazardous Substances RQs</b>	<b>RQ</b>
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-

### **U.S. State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

<b>Chemical Name</b>	<b>California Prop. 65</b>
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-

#### **U.S. State Right-to-Know Regulations**

<b>Chemical Name</b>	<b>New Jersey</b>	<b>Massachusetts</b>	<b>Pennsylvania</b>
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide	-	-	-

#### **U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not regulated

## **16. OTHER INFORMATION**

#### **Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information

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relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**