

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Ethidium Bromide

Other means of identification

Product Code(s) 0492
UN/ID no. 2811
Synonyms No information available

Recommended use of the chemical and restrictions on use

Recommended Use For Further Manufacturing Use Only.
Uses advised against Not for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address
 VWR International, LLC
 Radnor Corporate Center
 100 Matsonford Road
 Radnor, PA 19087-8660
Company Phone Number
E-mail Address

Manufacturer Address
 VWR International, LLC
 28600 Fountain Parkway
 Solon, Ohio 44139
 1-800-829-2805
 info@amresco-inc.com

Distributor
 AMRESCO INC.
 6681 Cochran Road
 SOLON, OHIO 44139

Emergency Telephone Number

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)

Acute Toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2
Germ cell mutagenicity	Category 2

Label elements

Emergency Overview

Danger

Hazard statements
 H302 - Harmful if swallowed
 H330 - Fatal if inhaled
 H341 - Suspected of causing genetic defects



Appearance Dark purple	Physical State Crystalline Powder	Odor No information available
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Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 Wear respiratory protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 Specific treatment is urgent (see .? on this label)
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Immediately call a POISON CENTER or doctor
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

Other Information**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide	1239-45-8	214-984-6	95-100	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. Artificial respiration and/or oxygen may be necessary. Call a physician immediately.
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

Dry chemical, CO₂, water spray or alcohol-resistant foam.

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 Avoid dust formation. 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-phenylphenanthridinium bromide 1239-45-8	-	-	-

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**

Physical State	Crystalline Powder	Odor	No information available
Appearance	Dark purple	Odor Threshold	No information available
Color	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4-7	
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	May be fatal if inhaled.
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-phenylphenanthridinium bromide 1239-45-8	-	-	-

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 Substances which should be regarded as being mutagenic to man.
Carcinogenicity No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide 1239-45-8	-	-	-	-

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

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of component(s) of unknown hazards to the aquatic environment

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

ntridinium bromide 1239-45-8			
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Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide 1239-45-8	-

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

Do not re-use empty containers.

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 1239-45-8	-	-	-	-

Chemical Name	California Hazardous Waste Status
3,8-Diamino-1-ethyl-6-phenylphenantridinium bromide 1239-45-8	-

14. TRANSPORT INFORMATION

DOT

UN/ID no. 2811
 Proper shipping name Toxic Solid, Organic N.O.S. (Ethidium Bromide)
 Hazard Class 6.1
 Packing Group I

IATA

UN/ID no. 2811
 Proper shipping name Toxic Solid, Organic N.O.S. (Ethidium Bromide)
 Hazard Class 6.1
 Packing Group I

15. REGULATORY INFORMATION

International Inventories

TSCA Does not comply
 DSL/NDSL 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/NDSL - 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.

Component	SARA 313 - Threshold Values %
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide 1239-45-8 (95-100)	-

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide 1239-45-8	-	-	-	-

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

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide 1239-45-8	-	-	-

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide - 1239-45-8	-

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
3,8-Diamino-1-ethyl-6-phenylphenanthridinium bromide 1239-45-8	-	-	-

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

Issuing Date 15-Jun-2009

Revision Date 08-Jan-2016

Revision Note

No information available

Disclaimer

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet