



# MATERIAL SAFETY DATA SHEET

Company	ELPIS-Biotech. Inc.
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## SECTION 1. CHEMICAL INFORMATION

Product name	Ethidium Bromide Solution
Cat. No.	EBA-1202

Volume of product package in dark brown bottle: 10ml.

**Product Use** : Laboratory Reagent. For R&D use only. Not for drug, household or other uses.

### Manufacturer/ Supplier information

Supply company : ELPIS-Biotech. Inc.

Address : 123-12 Jeonglim-dong, Seo-gu, Daejeon, Korea

Information service or emergency call : +82-42-581-8448 (042-581-8448, Korea)

Department in charge : Research Department

## SECTION 2. HAZARDOUS IDENTIFICATION



### Potential Acute Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

### Potential Chronic Health Effects:

Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.

**CARCINOGENIC EFFECTS:** Not available.

**MUTAGENIC EFFECTS:** Not available.

**TERATOGENIC EFFECTS:** Not available.

**DEVELOPMENTAL TOXICITY:** Not available.

### SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

#### Buffer's Components in Water:

Reagent	CAS#	Concentration, %
Ethidium Bromide	1239-45-8	≤ 1

### SECTION 4. FIRST AID MEASURES

#### Eye Contact:

Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used.

#### Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Serious Skin Contact:** Not available.

**Inhalation:** Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Serious Inhalation:** Not available.

#### Ingestion:

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:** Not available.

### SECTION 5. FIRE FIGHTING MEASURES

**Flammability of the Product:** May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

**Flash Points:** Not available.

Flammable Limits: Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), halogenated compounds.

#### Fire Hazards in Presence of Various Substances:

Flammable in presence of open flames and sparks. Slightly flammable to flammable in presence of heat.

#### Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

#### Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**SECTION 7. HANDLING AND STORAGE****Precautions:**

Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust.

**Storage:**

Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Liquid.
<b>Color / Odor</b>	Red / Odorless.
<b>Flash point</b>	> 392 F, > 200° C
<b>Explosive properties</b>	No data available.
<b>Vapor pressure</b>	< 1 MMHG @ 20°C
<b>Molecular Weight</b>	394.33 g/mole

**SECTION 10. STABILITY AND REACTIVITY**

<b>Stability</b>	Stable.
<b>Hazardous polymerization</b>	Will not occur
<b>Materials to Avoid</b>	Strong oxidizing agents, strong bases.
<b>Hazardous Decomposition Products:</b>	Carbon Monoxide, Carbon Dioxide
<b>Conditions of Instability</b>	Not available
<b>Instability Temperature</b>	Not available.
<b>Special Remarks on Reactivity</b>	Not available.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	No

## SECTION 11. TOXICOLOGICAL INFORMATION

**Routes of Entry** Ingestion.

**Toxicity to Animals:** LD50: Not available. LC50: Not available.

**Chronic Effects on Humans** Not available.

**Other Toxic Effects on Humans:**  
Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:** Not available.

**Special Remarks on other Toxic Effects on Humans:** Not available.

## SECTION 12. ECOLOGICAL INFORMATION

Data not yet available

## SECTION 13. DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material.

Observe all federal, state and local environmental regulations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## SECTION 14. TRANSPORT INFORMATION

Contact ELPIS Biotech, Inc. Company for Transportation Information.

## SECTION 15. REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: No products were found.

Other Regulations: Not available..

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

This product is not classified according to the EU regulations.

**HMIS (U.S.A.):** Health Hazard: 1  
Fire Hazard: 1  
Reactivity: 0  
Personal Protection: E

### **National Fire Protection Association (U.S.A.):**

Health: 1  
Flammability: 1  
Reactivity: 0  
Specific hazard:

### **Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.  
Safety glasses.

## **SECTION 16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide.

ELPIS Biotech Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Date of preparation of the first version : 2008. 10. 12.

Revised frequency and Date of preparation of the latest version : 2013. 04. 12. (2nd version)