

# Safety Data Sheet

## Ethidium Homodimer I, 2 mM in DMSO/H<sub>2</sub>O



### SECTION 1: Identification of the Substances and the Company/Undertaking

Identification of the Substance or Mixture **Product Name:** Ethidium Homodimer I, 2 mM DMSO/H<sub>2</sub>O **Catalog Number:** 5020

#### Company/Undertaking Identification

Ion Biosciences  
3055 Hunter Road, Box 3  
San Marcos, TX 78666  
+1 512.957.9123

#### 24 hour Emergency Response

866.536.0631  
301.431.8585  
+1 301.431.8585 (Outside the U.S.)  
For Research Use Only. Not for use in diagnostic procedures.

### SECTION 2: Hazards Identification

#### GHS - Classification

**Signal word:** WARNING

**Hazard Pictograms:**



**Health Hazards:** Skin corrosion/irritation– Category 1B, Serious eye damage/irritation– Category 1, Carcinogenicity– Category 2.

**Physical Hazards:** not applicable

**Hazard statements:** H351– Suspected of causing cancer.

#### Precautionary Statements

P201– Obtain special instructions before use.  
P280 – Wear protective gloves, protective clothing and eye or face protection.

**Response:** P308 + P313– If exposed or concerned: Get medical advice/attention.

**Storage:** not applicable

**Disposal:** P501– Dispose of contents and container in accordance with all local, regional, national and international regulations.

### SECTION 3: Composition/Information on Ingredients

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No 1278/2008
Ethidium Homodimer I	61926-22-5	-	-	~ 0.1%	N/A
DMSO	67-68-5	200-664-3	-	27%	N/A
Water	7732-18-5	-	-	73%	N/A

### SECTION 4: First Aid Measures

**Skin contact:** Rinse with water and soap for several minutes. If irritation persists, seek medical care.

**Eye contact:** Flush eyes with water for 15 minutes. If irritation persists, seek medical care.

**Ingestion:** If swallowed, do NOT induce vomiting. Rinse mouth with water. Seek medical care

**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration and seek medical care.

**Most important symptoms and effects, both acute and delayed:**  
H261– In contact with water releases flammable gases, H314– Causes severe skin burns and eye damage, H318– Causes serious eye damage, H351– Suspected of causing cancer.

**Notes to physician:** Treat symptomatically.

## SECTION 5: Firefighting Measures

### Extinguishing Media

**Suitable extinguishing media:** Water spray. Carbon Dioxide (CO<sub>2</sub>) Foam. Dry chemical.

**Unsuitable extinguishing media:** Not known.

**Specific hazards arising from the chemical:** Not known.

**Advice for firefighters:** Burning produces poisonous sulfur oxide gas. Wear self contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Always wear recommended Personal Protective Equipment. Avoid breathing vapors. Remove all sources of ignition.

**Environmental precautions:** Avoid discharge into drains and waterways.

### Methods and material for containment and cleaning up:

**Contain spillage.** Soak up with absorbent material, place in appropriate containers for disposal.

## SECTION 7: Handling and Storage

**Handling:** Use personal protective equipment as required. No special handling advices are necessary.

### Conditions for safe storage, including any incompatibilities:

Store at –20°C. Keep container tightly closed in a dry and well-ventilated place.

**Specific end use(s):** For research use only.

## SECTION 8: Exposure Controls/Personal Protection

### Control Parameters/Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Ethidium homodimer I	None	None	None	None

**Engineering Measures:** Ensure adequate ventilation, especially in confined areas.

### Exposure Controls

**Personal Protective Equipment:** Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

**Hand protection:** Wear suitable gloves. Glove material: Compatible chemical resistant gloves.

**Skin and Body protection:** Wear suitable protective clothing.

**Respiratory protection:** In case of insufficient ventilation, wear respirators and components tested and approved under appropriate government standards.

**Eye protection:** Tight sealing safety glasses.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties.

**Appearance:** Liquid.

**Odor:** No data available.

**Odor threshold:** No data available.

**pH:** No data available.

**Boiling point/boiling range:** No data available.

**Melting point/melting range:** No data available.

**Flash point:** No data available.

**Evaporation rate:** No data available.

**Flammability:** No data available.

**Explosive Limits:** No data available.

**Vapor pressure:** No data available.

**Vapor density:** No data available.

**Relative density:** No data available.

**Solubility:** Soluble in water.

**Partition coefficient (n-octanol/water):** No data available.

**Autoignition temperature:** No data available.

**Decomposition temperature:** No data available.

**Viscosity:** No data available.

**Explosive properties:** No data available.

**Oxidizing properties:** No data available.

## SECTION 10: Stability and Reactivity

**Reactivity:** None known.

**Stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** No data available.

**Conditions to avoid:** No information available.

**Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions. –Carbon oxides, sulfur

## SECTION 11: Toxicological Information

Information on toxicological effects

<b>Oral LD50</b>	Rat– 14,500 mg/kg
<b>Dermal LD50</b>	Rat– 4 h- 40250 ppm
<b>Inhalation LD50</b>	Rabbit > 5,000 mg/kg

Principal Routes of Exposure

**Acute Toxicity:** Data are conclusive but insufficient for classification.

**Skin corrosion/irritation:** Causes skin burns.

**Serious eye damage/irritation:** Causes serious eye damage.

**Respiratory or skin sensitization:** Data are conclusive but insufficient for classification.

**Ingestion:** harmful if swallowed

**Carcinogenicity:**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

GHS

**Germ cell mutagenicity:** Data are conclusive but insufficient for classification.

**Reproductive toxicity:** Data are conclusive but insufficient for classification.

**Aspiration hazard:** Data are conclusive but insufficient for classification.

## SECTION 12: Ecological Information

**Ecotoxicity:** The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to aquatic invertebrates	Toxicity to fish	Microtox Data	log Pow
Etidium homodimer I	No data available.	No data available.	LC50(96hrs) 10 species from 32500 to 43000 ppm.	No data available.	No data available.

**Mobility in soil:** No information available.

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.

**Results of PBT and vPvB assessment:** This mixture does not contain substances that are assessed to be a PBT or a vPvB.

**Biodegradation:** Dimethyl sulfoxide: 90 % (28d).

## SECTION 13: Disposal Considerations

**Waste treatment methods:** The generation of waste should be avoided or minimized wherever possible. Empty containers or lines may retain some product residues.

Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

## SECTION 14: Transport Information

**IATA/ADR/DOT-US/IMDG:** Not classified as dangerous in the meaning of transport regulations.

**UN number:** 3096

**UN proper shipping name:** CORROSIVE SOLID, WATER-REACTIVE, N.O.S. (5,5'-[Ethylenebis(iminotrimethylene)]bis[3,8-diamino-6-ph enylphenanthridinium] dichloride dihydrochloride)

**Transport hazard class(es):** 8 (4.3)

**Packing group:** II

**Environmental hazards:** Not applicable.

**Special precautions for use:** Not applicable.

**Transport in bulk according to Annex II of MARPOL 73/78 and the**

**IBC Code:** Not applicable.

## SECTION 15: Regulatory Information

Component	US TSCA
Ethidium homodimer I 61926-22-1	-

### US Federal Regulations

**SARA 313:** This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61):** This product does not contains HAPs.

### US State Regulations

**California Proposition 65:** This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class:** E– Corrosive materials, D2A– Very toxic materials.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

## SECTION 16: Other Information

For Research Use Only. Not for use in diagnostic procedures.

“The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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