

# Safety Data Sheet

## Ethidium Homodimer I (EthD-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 in DMSO/H<sub>2</sub>O **Catalog No:** 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:** Carcinogenicity– Category 2

**Physical Hazards:** GHS Physical Hazard– Flammable liquids– Category 4

**Hazard statements:** H227– Combustible liquid.

H318– Causes serious eye damage.

H351– Suspected of causing cancer.

#### Precautionary Statements

**Prevention:** P210– Keep away from heat, sparks, open flames, other ignition sources. No smoking.

P280– Wear protective gloves/clothing/eye and face protection

P202– Do not handle until all safety precautions read and understood.

**Response:** P370 + P378– In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

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

**Storage:** P403– Store in well-ventilated place.

**Disposal:** P501– Dispose of contents/container to an approved waste disposal plant.

#### HMIS

Health	4
Flammability	2
Reactivity	0

### SECTION 3: Composition/Information on Ingredients

Name	CAS No.	EC No.	Index No.	Weight %	Classification according to regulation (EC)No1278/2008
Ethidium Homodimer I	61926-22-5	-	-	<0.1%	-
DMSO	67-68-5	200-664-3	-	~25%	NA
Water	7732-18-5	-	-	~75%	NA

### 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:** Not applicable

**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 gases, sulfur oxides. Wear self contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Avoid breathing vapors, mist, or gas. Remove all sources of ignition.

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

**Methods and material for containment and cleaning up:** Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

## SECTION 7: Handling and Storage

**Handling:** Avoid inhalation of vapor or mist. Avoid direct contact with substance.

**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

**Substance:** Dimethylsulfoxide, CAS no. 67-68-5

Country	Austria	Belgium	Denmark	European Union	France	Germany	Hungary	Italy	Poland
Limit value, 8 hours	160mg/m <sup>3</sup>	-	160mg/m <sup>3</sup>	-	-	160mg/m <sup>3</sup>	-	-	-
Limit Value, short term	-	-	320mg/m <sup>3</sup>	-	-	320mg/m <sup>3</sup>	-	-	-

  

Country	Spain	Sweden	Netherlands	United Kingdom	USA	Australia	Canada	Japan	South Korea
Limit value, 8 hours	-	160mg/m <sup>3</sup>	-	-	-	-	-	-	-
Limit Value, short term	-	500mg/m <sup>3</sup>	-	-	-	-	-	-	-

### 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:** Handle with gloves. Inspect gloves prior to use. Use proper glove removal technique to avoid skin contact with the product. Dispose of contaminated gloves

**Respiratory protection:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection:** Safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at end of workday.

## 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

**Stability:** Stable under normal conditions.

**Materials to avoid:** Strong acids. Strong oxidizing agents.

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

**Hazardous decomposition products:** Hazardous decomposition

## SECTION 11: Toxicological Information

**Acute Toxicity DMSO:**

<b>Oral LD50</b>	Rat- 14,500 mg/kg
<b>Inhalation LC50</b>	Rat- 4 h- 40250 ppm
<b>Reactivity</b>	Rabbit- > 5,000 mg/kg

**Germ cell mutagenicity:** Salmonella typhimurium assay (Ames test): negative (+/- activation), DMSO is used as a neutral solvent in the Ames mutagen test.

**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 carcinogen or potential carcinogen by OSHA.

**GHS**

**Specific target organ toxicity- single exposure:** No data available.

**Specific target organ toxicity- repeated exposure:** No data available.

**Potential Health Effects**

**Eyes:** May cause eye irritation.

**Skin:** May be harmful if absorbed through skin. May cause skin irritation.

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion:** May be harmful if swallowed.

**Reproductive toxicity:** Experiments have shown reproductive toxicity effects on laboratory animals (Dimethyl sulfoxide)

**Sensitization:** No data available.

**Additional Information:** RTECS: PV6210000 (DMSO)

## SECTION 12: Ecological Information

**Toxicity (DMSO):** The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm.

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

**Mobility:** No information available.

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

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

**Other adverse effects:** No information available.

## SECTION 13: Disposal Considerations

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**Waste treatment methods:** Do not dispose product directly into sewage.

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

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

**Packing group:** None.

**Proper shipping name:** No dangerous good in sense of these transport regulations.

**UN-No:** None.

**Hazard class:** None.

**Environmental hazards:** None.

**Subsidiary class:** None.

## SECTION 15: Regulatory Information

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US Federal Regulations

**US Toxic Substances Control Act (TSCA):** Not listed.

**SARA 302:** No chemicals were found.

**SARA 313:** No chemicals were found.

**SARA 311/312 Hazards:** DMSO: fire hazard, chronic health hazard

**Acute Health Hazard:** Yes

**Chronic Health Hazard:** No

**Fire Hazard:** Yes

**Sudden Release of Pressure Hazard:** No

**Reactive Hazard:** No

## SECTION 16: Other Information

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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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