

# MATERIAL SAFETY DATA SHEET

## iNOS Electrophoresis Standard

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Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 01/10/2006  
Revision: 01/10/2006  
Supersedes Revision: 06/27/1996  
Date Created: 06/27/1996

### 1. Product and Company Identification

**Product Code:** 360862  
**Product Name:** iNOS Electrophoresis Standard  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335  
**Chemical Family:** Enzymes  
**Synonyms:** Inducible Nitric Oxide Synthase; NOS II;

### 2. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Percentage	OSHA PEL	ACGIH TLV	Other Limits
1. iNOS Positive Control	NA	0.01 %	No data.	No data.	No data.
2. HEPES, free acid	7365-45-9	1.192 %	No data.	No data.	No data.
3. Glycerol	56-81-5	20.0 %	No data.	10 mg/m3	No data.
4. Water	7732-18-5	78.798 %	No data.	No data.	No data.
Hazardous Components (Chemical Name)	RTECS #	OSHA STEL	OSHA CEIL	ACGIH STEL	ACGIH CEIL
1. iNOS Positive Control	NA	No data.	No data.	No data.	No data.
2. HEPES, free acid	TL6809000	No data.	No data.	No data.	No data.
3. Glycerol	MA8050000	No data.	No data.	No data.	No data.
4. Water	ZC0110000	No data.	No data.	No data.	No data.

### 3. Hazards Identification

**Emergency Overview:** No data available.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Potential Health Effects (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract.  
May be harmful by inhalation, ingestion, or skin absorption.  
May cause eye, skin, or respiratory system irritation.  
The toxicological properties of this compound have not been fully evaluated.  
**LD 50/LC 50:** Please refer to Section 11.  
**Signs and Symptoms Of Exposure:** Prolonged exposure can cause: Nausea, headache, and vomiting.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**  
If inhaled remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  
If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.  
In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water. After initial flushings, remove any contact lenses and continue flushing for at least 20 minutes. Have eyes examined and tested by medical personnel.  
In case of skin contact, immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

**Flash Pt:** No data.  
**Explosive Limits:** LEL: No data. UEL: No data.



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**Corrosion Rate:** No data.  
**pH:** No data.  
**Appearance and Odor:** A clear, colorless solution.

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** No data available.  
**Incompatibility - Materials To Avoid:** strong bases  
 strong oxidizing agents  
**Hazardous Decomposition Or Byproducts:** carbon dioxide  
 carbon monoxide  
 nitrogen oxides  
 sulfur oxides  
**Hazardous Polymerization:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Polymerization:** No data available.

### 11. Toxicological Information

**Toxicological Information:** The toxicological effects of this compound have not been thoroughly studied.  
**Chronic Toxicological Effects:** Glycerol - Investigated as a mutagen and reproductive effector.  
  
 Glycerol - Target Organ Data:  
 Effects on fertility (male fertility index)  
 Effects on fertility (post-implantation mortality)  
 Paternal effects (spermatogenesis)  
 Paternal effects (testes, epididymis, sperm duct)  
  
 Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.  
 See actual entry in RTECS for complete information.  
 Glycerol RTECS Number: MA8050000  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**Ecological Information:** Runoff from fire control or dilution water may cause pollution.

### 13. Disposal Considerations

**Waste Disposal Method:** Dispose in accordance with local, state and federal regulations.

### 14. Transport Information

**LAND TRANSPORT (US DOT)**  
**DOT Proper Shipping Name:** No data available.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. iNOS Positive Control	NA	No	No	No	No
2. HEPES, free acid	7365-45-9	No	No	No	No
3. Glycerol	56-81-5	No	No	No	No
4. Water	7732-18-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
1. iNOS Positive Control	NA	No	No	No	No

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Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	CA PROP 65
2. HEPES, free acid	7365-45-9	No	No	No	No
3. Glycerol	56-81-5	No	No	No	No
4. Water	7732-18-5	No	No	No	No

### 16. Other Information

#### Company Policy or Disclaimer

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