

# Product Information

## Precoated (Goat Anti-Mouse IgG) EIA 96-Well Strip Plate

### COMMENTS:

Each plate is coated with the Goat Anti-Mouse IgG antibody. This Material Safety Data Sheet (MSDS) is for the antibody only. An MSDS on this material is not required as this substance is a naturally occurring animal product. However, we do recommend the following minimum precautions when using this substance:

- Do NOT get in eyes, on skin, or on clothing.
- Do NOT take internally.
- Wear protective gloves and safety glasses.
- Keep container closed.
- Store at correct temperature.
- Do NOT reuse this container.
- Do NOT release this material to the environment; dispose of by incineration in accordance with federal, state, and local regulations.
- Wash thoroughly after handling.

### WARNING:

**Not for human or animal disease diagnostics or therapeutic drug use.**

*The above information is believed to be correct but should only be used as a guide. Cayman Chemical disclaims any express or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental, or consequential damages resulting from reliance on the above information.*

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Date #: 07/ /2010

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

## 1. Product and Company Identification

**Product Code:** SKC-120F  
**Product Name:** Tween 20  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

## 2. Hazards Identification

**Emergency Overview:** Avoid contact and inhalation.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 product have not been fully evaluated.  
**LD 50 / LC 50:** Please refer to Section 11.  
**Signs and Symptoms Of Exposure:** No data available.

## 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. Polyoxyethylene (20) sorbitan monolaurate (Tween 20)	9005-64-5	100.0 %	500-018-3	TR7400000

## 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 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 for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

## 5. Fire Fighting Measures

**Flash Pt:** 232.00 C  
**Explosive Limits:** LEL: No data. UEL: No data.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
 Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid breathing vapors and provide adequate ventilation.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Absorb spill with inert material (e.g. dry sand or earth), then place in a proper chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Polyoxyethylene (20) sorbitan monolaurate (Tween 20)	9005-64-5	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** 232.00 C

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

**Specific Gravity (Water = 1):** 1.095 at 25.0 C

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** N.A.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

**pH:** No data.

**Appearance and Odor:** A clear, yellow viscous liquid

### 10. Stability and Reactivity

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

### 11. Toxicological Information

**Chronic Toxicological Effects:** The toxicological effects of this product have not been thoroughly studied.  
  
Tween - Toxicity Data: Oral LD50 (rat): 36,700 mg/kg; Irritation Data: Skin (human): 15 mg/3D mild;  
Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.  
Tween RTECS Number: TR7400000  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**Ecological Information:** Avoid release into the environment.  
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:** Not dangerous goods.  
**LAND TRANSPORT (European ADR/RID)**  
**ADR/RID Shipping Name:** Not dangerous goods.  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Shipping Name:** Not dangerous goods.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**European Community Hazard Symbol codes**  
No data available.  
**European Community Risk and Safety Phrases**  
S24/25 - Avoid contact with skin and eyes.  
S37/39 - Wear suitable gloves and eye/face protection.  
**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Polyoxyethylene (20) sorbitan monolaurate (Tween 20)	9005-64-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. Polyoxyethylene (20) sorbitan monolaurate (Tween 20)	9005-64-5	HAP, ODC ( )	No	Inventory	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## EIA Tracer Dye

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120J  
**Product Name:** EIA Tracer Dye  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Avoid contact and inhalation.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 burns.  
May cause eye, skin, or respiratory system irritation.  
May temporarily stain skin.  
The toxicological properties of this product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. EIA Tracer Dye	NA	100.0 %	NA

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** No data available.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid breathing vapors and provide adequate ventilation.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Absorb spill with inert material (e.g. dry sand or earth), then place in a proper chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. EIA Tracer Dye	NA	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

**pH:** No data.

**Appearance and Odor:** A red solution

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** No data available.  
**Incompatibility - Materials To Avoid:** acids  
**Hazardous Decomposition Or Byproducts:** sodium oxides  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Reactions:** No data available.

### 11. Toxicological Information

**:** The toxicological effects of this product have not been thoroughly studied.  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**:** Avoid release into the environment.  
 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** Not dangerous goods.  
**LAND TRANSPORT (European ADR/RID)**  
**ADR/RID Shipping Name** Not dangerous goods.  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Shipping Name** Not dangerous goods.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**European Community Hazard Symbol codes**

No data available.

**European Community Risk and Safety Phrases**

- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37/39 - Wear suitable gloves and eye/face protection.
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. EIA Tracer Dye	NA	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. EIA Tracer Dye	NA	HAP, ODC ()	No	No	

### 16. Other Information

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## EIA Antiserum Dye

Page: 1

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120K  
**Product Name:** EIA Antiserum Dye  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Harmful.  
May cause cancer.

**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

**Health Hazards (Acute and Chronic):** Material may be irritating to 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 product have not been fully evaluated.

**LD 50 / LC 50:** Please refer to Section 11.

**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. EIA Antiserum Dye	NA	100.0 %	NA

### 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 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 for at least 20 minutes. 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.

**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.

**Hazardous Combustion Products:** No data available.

**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.

**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

# MATERIAL SAFETY DATA SHEET

## EIA Antiserum Dye

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
 Avoid breathing vapors and provide adequate ventilation.  
 As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
 Absorb spill with inert material (e.g. dry sand or earth), then place in a proper chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
 Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
 Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
 Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. EIA Antiserum Dye	NA	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
 Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

**pH:** No data.

**Appearance and Odor:** A blue solution

# MATERIAL SAFETY DATA SHEET

## EIA Antiserum Dye

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:** No data available.

**Incompatibility - Materials To Avoid:** No data available.

**Hazardous Decomposition Or Byproducts:** No data available.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions:** No data available.

### 11. Toxicological Information

**:** The toxicological effects of this product have not been thoroughly studied.

**Chronic Toxicological Effects:** Contains a component that has been investigated as a carcinogen.

**Carcinogenicity/Other Information:** Contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

**Carcinogenicity:** NTP? No IARC Monographs? Yes OSHA Regulated? No

### 12. Ecological Information

**:** Avoid release into the environment.  
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 Not dangerous goods.

**LAND TRANSPORT (European ADR/RID)**  
ADR/RID Shipping Name Not dangerous goods.

**AIR TRANSPORT (ICAO/IATA)**  
ICAO/IATA Shipping Name Not dangerous goods.

**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**European Community Hazard Symbol codes** Xn: Harmful; Carcinogenic Hazard: 2

**European Community Risk and Safety Phrases**  
R45 - May cause cancer.  
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. EIA Antiserum Dye	NA	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. EIA Antiserum Dye	NA	HAP, ODC ( )	No	No	

### 16. Other Information

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## Ellman's Reagent

Page: 1

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120I  
**Product Name:** Ellman's Reagent  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Irritant.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 be irritating to eyes, respiratory system and skin.  
The toxicological properties of this compound have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** Ingestion of large amounts causes vomiting and diarrhea.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. Ellman's Reagent	NA	100.0 %	NA

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid raising and breathing dust, and provide adequate ventilation.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Transfer to a proper chemical waste container for disposal.

# MATERIAL SAFETY DATA SHEET

## Ellman's Reagent

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07/07/2010

### 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling
<b>Precautions To Be Taken in Handling:</b>	Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated exposure.
<b>Precautions To Be Taken in Storing:</b>	Keep tightly closed. Store at correct temperature.
<b>Other Precautions:</b>	Protect from light.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Ellman's Reagent	NA	No data.	No data.	No data.

<b>Protective Equipment Summary - Hazard Label Information:</b>	Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood
<b>Respiratory Equipment (Specify Type):</b>	NIOSH approved respirator, as conditions warrant.
<b>Eye Protection:</b>	Safety glasses
<b>Protective Gloves:</b>	Compatible chemical-resistant gloves
<b>Other Protective Clothing:</b>	Lab coat
<b>Ventilation:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.
<b>Work/Hygienic/Maintenance Practices:</b>	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Wash thoroughly after handling.

### 9. Physical and Chemical Properties

<b>Physical States:</b>	[ ] Gas [ ] Liquid [ X ] Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	No data.
<b>Flash Pt:</b>	No data.
<b>Explosive Limits:</b>	LEL: No data. UEL: No data.
<b>Specific Gravity (Water = 1):</b>	No data.
<b>Bulk density:</b>	No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	No data.
<b>Vapor Density (vs. Air = 1):</b>	No data.
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	No data.
<b>Solubility in Water:</b>	No data.
<b>Percent Volatile:</b>	No data.
<b>Heat Value:</b>	No data.
<b>Particle Size:</b>	No data.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	No data.
<b>Appearance and Odor:</b>	A lyophilized powder

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	protect from light
<b>Incompatibility - Materials To Avoid:</b>	metals strong acids strong bases strong oxidizing agents

# MATERIAL SAFETY DATA SHEET

## Ellman's Reagent

07/07/2010

**Hazardous Decomposition Or Byproducts:** carbon dioxide  
carbon monoxide  
hydrogen chloride gas  
hydrogen iodide  
nitrogen oxides  
phosphorus oxides  
potassium oxides  
sodium oxides  
sulfur oxides

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**Conditions To Avoid - Hazardous Reactions:** No data available.

### 11. Toxicological Information

**:** The toxicological effects of this product have not been thoroughly studied.

**Carcinogenicity/Other Information:** No data available.

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

**:** Avoid release into the environment.  
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** Not dangerous goods.

**LAND TRANSPORT (European ADR/RID)**

**ADR/RID Shipping Name** Not dangerous goods.

**AIR TRANSPORT (ICAO/IATA)**

**ICAO/IATA Shipping Name** Not dangerous goods.

**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**European Community Hazard Symbol codes** Xi: Irritant

**European Community Risk and Safety Phrases**

R21 - Harmful in contact with skin.

R36/37/38 - Irritating to eyes, respiratory system and skin.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Ellman's Reagent	NA	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. Ellman's Reagent	NA	HAP, ODC ( )	No	No	

### 16. Other Information

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## EIA Buffer Concentrate (10X)

Page: 1

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120D  
**Product Name:** EIA Buffer Concentrate (10X)  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Irritant.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. Potassium phosphate, dibasic	7758-11-4	13.3 %	231-834-5	NA
2. Potassium phosphate, Monobasic	7778-77-0	3.21 %	231-913-4	TC6615500
3. Sodium azide	26628-22-8	0.1 %	247-852-1	VY8050000
4. Sodium chloride	7647-14-5	23.4 %	231-598-3	VZ4725000
5. EDTA, tetrasodium salt, hydrate	194491-31-1	0.38 %	NA	NA
6. Bovine Serum Albumin (BSA)	9048-46-8	1.0 %	232-936-2	MT6446000
7. Water	7732-18-5	58.61 %	231-791-2	ZC0110000

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.

# MATERIAL SAFETY DATA SHEET

## EIA Buffer Concentrate (10X)

**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
 Avoid breathing vapors and provide adequate ventilation.  
 As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
 Absorb spill with inert material (e.g. dry sand or earth), then place in a proper chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
 Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
 Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
 Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limits
1. Potassium phosphate, dibasic	7758-11-4	No data.	No data.	No data.
2. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.
3. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.
4. Sodium chloride	7647-14-5	No data.	No data.	No data.
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No data.	No data.	No data.
6. Bovine Serum Albumin (BSA)	9048-46-8	No data.	No data.	No data.
7. Water	7732-18-5	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
 Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**MATERIAL SAFETY DATA SHEET**  
**EIA Buffer Concentrate (10X)**

07/07/2010

<b>Solubility in Water:</b>	No data.
<b>Percent Volatile:</b>	No data.
<b>Heat Value:</b>	No data.
<b>Particle Size:</b>	No data.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	7.0
<b>Appearance and Odor:</b>	A clear, colorless solution

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ]    Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	No data available.
<b>Incompatibility - Materials To Avoid:</b>	heavy metals strong acids strong oxidizing agents
<b>Hazardous Decomposition Or Byproducts:</b>	carbon dioxide carbon monoxide explosive heavy metal azides hydrogen chloride gas metal oxide fumes phosphorus oxides potassium oxides sodium oxides
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ]    Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

### 11. Toxicological Information

:	The toxicological effects of this compound have not been thoroughly studied.
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No    IARC Monographs? No    OSHA Regulated? No

### 12. Ecological Information

:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state, and federal regulations.
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### 14. Transport Information

<b>LAND TRANSPORT (US DOT)</b>	
<b>DOT Proper Shipping Name</b>	Not dangerous goods.
<b>LAND TRANSPORT (European ADR/RID)</b>	
<b>ADR/RID Shipping Name</b>	Not dangerous goods.
<b>AIR TRANSPORT (ICAO/IATA)</b>	
<b>ICAO/IATA Shipping Name</b>	Not dangerous goods.
<b>Additional Transport Information:</b>	Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

<b>European Community Hazard Symbol codes</b>	Xi: Irritant
<b>European Community Risk and Safety Phrases</b>	
R36/37/38	- Irritating to eyes, respiratory system and skin.
S28A	- After contact with skin, wash immediately with plenty of water.
S36/37/39	- Wear suitable protective clothing, gloves and eye/face protection.
S45	- In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

**MATERIAL SAFETY DATA SHEET**  
**EIA Buffer Concentrate (10X)**

07/07/2010

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Potassium phosphate, dibasic	7758-11-4	No	No	No	No
2. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
3. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No
4. Sodium chloride	7647-14-5	No	No	No	No
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No	No	No	No
6. Bovine Serum Albumin (BSA)	9048-46-8	No	No	No	No
7. 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	HPV/LPV
1. Potassium phosphate, dibasic	7758-11-4	HAP, ODC ()	No	Inventory	
2. Potassium phosphate, Monobasic	7778-77-0	HAP, ODC ()	No	Inventory	
3. Sodium azide	26628-22-8	HAP, ODC ()	No	Inventory	
4. Sodium chloride	7647-14-5	HAP, ODC ()	No	Inventory	
5. EDTA, tetrasodium salt, hydrate	194491-31-1	HAP, ODC ()	No	No	
6. Bovine Serum Albumin (BSA)	9048-46-8	HAP, ODC ()	No	Inventory	
7. Water	7732-18-5	HAP, ODC ()	No	Inventory	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## Wash Buffer Concentrate (400X)

Page: 1

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120E  
**Product Name:** Wash Buffer Concentrate (400X)  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Irritant.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. Potassium phosphate, dibasic	7758-11-4	53.0 %	231-834-5	NA
2. Potassium phosphate, Monobasic	7778-77-0	12.9 %	231-913-4	TC6615500
3. Water	7732-18-5	34.1 %	231-791-2	ZC0110000

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** Emits toxic fumes under fire conditions.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
 Avoid breathing vapors and provide adequate ventilation.  
 As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
 Absorb spill with inert material (e.g. dry sand or earth), then place in a proper chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
 Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
 Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
 Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Potassium phosphate, dibasic	7758-11-4	No data.	No data.	No data.
2. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.
3. Water	7732-18-5	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
 Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

# MATERIAL SAFETY DATA SHEET

## Wash Buffer Concentrate (400X)

<b>pH:</b>	7.4
<b>Appearance and Odor:</b>	A clear, colorless solution

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ <input type="checkbox"/> ]    Stable [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Instability:</b>	No data available.
<b>Incompatibility - Materials To Avoid:</b>	strong oxidizing agents
<b>Hazardous Decomposition Or Byproducts:</b>	carbon dioxide carbon monoxide phosphorus oxides potassium oxides
<b>Possibility of Hazardous Reactions:</b>	Will occur [ <input type="checkbox"/> ]    Will not occur [ <input checked="" type="checkbox"/> ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

### 11. Toxicological Information

:	The toxicological effects of this product have not been thoroughly studied.
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No    IARC Monographs? No    OSHA Regulated? No

### 12. Ecological Information

:	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state, and federal regulations.
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### 14. Transport Information

<b>LAND TRANSPORT (US DOT)</b>	
DOT Proper Shipping Name	Not dangerous goods.
<b>LAND TRANSPORT (European ADR/RID)</b>	
ADR/RID Shipping Name	Not dangerous goods.
<b>AIR TRANSPORT (ICAO/IATA)</b>	
ICAO/IATA Shipping Name	Not dangerous goods.
<b>Additional Transport Information:</b>	Transport in accordance with local, state, and federal regulations.

### 15. Regulatory Information

**European Community Hazard Symbol codes**    Xi: Irritant

**European Community Risk and Safety Phrases**

R36/37/38 - Irritating to eyes, respiratory system and skin.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Potassium phosphate, dibasic	7758-11-4	No	No	No	No
2. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
3. 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	HPV/LPV
1. Potassium phosphate, dibasic	7758-11-4	HAP, ODC ( )	No	Inventory	
2. Potassium phosphate, Monobasic	7778-77-0	HAP, ODC ( )	No	Inventory	
3. Water	7732-18-5	HAP, ODC ( )	No	Inventory	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

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# MATERIAL SAFETY DATA SHEET

## 8-hydroxy-2-deoxy Guanosine AChE Tracer

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 7/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120B  
**Product Name:** 8-hydroxy-2-deoxy Guanosine AChE Tracer  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Avoid contact and inhalation.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. 8-hydroxy-2-deoxy Guanosine AChE Tracer	NA	100.0 %	NA

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** No data available.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid raising and breathing dust, and provide adequate ventilation.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Transfer to a proper chemical waste container for disposal.

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine AChE Tracer**

Page: 2

07/07/2010

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
Store at correct temperature.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. 8-hydroxy-2-deoxy Guanosine AChE Tracer	NA	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ ] Liquid [ X ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

**pH:** No data.

**Appearance and Odor:** A lyophilized powder

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]

**Conditions To Avoid - Instability:** No data available.

**Incompatibility - Materials To Avoid:** No data available.

**Hazardous Decomposition Or Byproducts:** No data available.

**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine AChE Tracer**

07/07/2010

**Conditions To Avoid - Hazardous Reactions:** No data available.

**11. Toxicological Information**

**:** The toxicological effects of this product have not been thoroughly studied.

**Carcinogenicity/Other Information:** No data available.

**Carcinogenicity:** NTP? No    IARC Monographs? No    OSHA Regulated? No

**12. Ecological Information**

**:** Avoid release into the environment.  
 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** Not dangerous goods.

**LAND TRANSPORT (European ADR/RID)**

**ADR/RID Shipping Name** Not dangerous goods.

**AIR TRANSPORT (ICAO/IATA)**

**ICAO/IATA Shipping Name** Not dangerous goods.

**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

**15. Regulatory Information**

**European Community Hazard Symbol codes**

No data available.

**European Community Risk and Safety Phrases**

S24/25 - Avoid contact with skin and eyes.

S37/39 - Wear suitable gloves and eye/face protection.

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. 8-hydroxy-2-deoxy Guanosine AChE Tracer	NA	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. 8-hydroxy-2-deoxy Guanosine AChE Tracer	NA	HAP, ODC ()	No	No	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

# MATERIAL SAFETY DATA SHEET

## 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120A  
**Product Name:** 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (250)294-9065

### 2. Hazards Identification

**Emergency Overview:** Avoid contact and inhalation.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (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 product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#
1. 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody	NA	100.0 %	NA

### 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 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 for at least 20 minutes. 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.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** No data available.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
 Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine EIA Monoclonal**  
**Antibody**

**6. Accidental Release Measures**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
 Avoid raising and breathing dust, and provide adequate ventilation.  
 As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
 Transfer to a proper chemical waste container for disposal.

**7. Handling and Storage**

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
 Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
 Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
 Store at correct temperature.

**8. Exposure Controls/Personal Protection**

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody	NA	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
 Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
 Wash thoroughly after handling.

**9. Physical and Chemical Properties**

**Physical States:** [ ] Gas [ ] Liquid [ X ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

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

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

**pH:** No data.

**Appearance and Odor:** A lyophilized powder

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine EIA Monoclonal**  
**Antibody**

**10. Stability and Reactivity**

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** No data available.  
**Incompatibility - Materials To Avoid:** No data available.  
**Hazardous Decomposition Or Byproducts:** No data available.  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Reactions:** No data available.

**11. Toxicological Information**

**:** The toxicological effects of this product have not been thoroughly studied.  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

**12. Ecological Information**

**:** Avoid release into the environment.  
 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** Not dangerous goods.  
**LAND TRANSPORT (European ADR/RID)**  
**ADR/RID Shipping Name** Not dangerous goods.  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Shipping Name** Not dangerous goods.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

**15. Regulatory Information**

**European Community Hazard Symbol codes**  
 No data available.  
**European Community Risk and Safety Phrases**  
 S24/25 - Avoid contact with skin and eyes.  
 S37/39 - Wear suitable gloves and eye/face protection.  
**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody	NA	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. 8-hydroxy-2-deoxy Guanosine EIA Monoclonal Antibody	NA	HAP, ODC ( )	No	No	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**

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# MATERIAL SAFETY DATA SHEET

## 8-hydroxy-2-deoxy Guanosine EIA Standard

StressMarq Biosciences Inc.  
PO Box 30244, Suite 405, 3989 Quadra St.  
Victoria, BC V8X5E1

Date Created: 07/07/2010

### 1. Product and Company Identification

**Product Code:** SKC-120C  
**Product Name:** 8-hydroxy-2-deoxy Guanosine EIA Standard  
**Manufacturer Information**  
**Company Name:** StressMarq Biosciences Inc.  
**Emergency Contact:** StressMarq Biosciences Inc. (250)294-9065  
**Information:** StressMarq Biosciences Inc. (294)294-9065

### 2. Hazards Identification

**Emergency Overview:** Highly Flammable.  
Target Organ(s): blood, central nervous system, eyes, liver, reproductive system, respiratory system, skin.  
The hazards identified with this product are those associated with the solvent(s).

**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection

**Health Hazards (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 product have not been fully evaluated.

**LD 50 / LC 50:** Please refer to Section 11.

**Signs and Symptoms Of Exposure:** Irritation eyes, skin, nose; headache, drowsiness, lassitude (weakness, exhaustion), narcosis; cough; liver damage; anemia; reproductive, teratogenic effects.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. 8-hydroxy-2-deoxy Guanosine	NA	< 0.01 %	NA	NA
2. Ethyl alcohol	64-17-5	>99.99 %	200-578-6	KQ6300000

### 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 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 for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

**Flash Pt:** 14.00 C Method Used: Closed Cup  
**Explosive Limits:** LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C  
**Autoignition Pt:** 363.00 C  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
Note: Flammable as diluted in ethanol.  
**Unusual Fire and Explosion Hazards:** Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.  
Container explosion may occur under fire conditions.  
Emits toxic fumes under fire conditions.  
Sensitive to static discharge.

# MATERIAL SAFETY DATA SHEET

## 8-hydroxy-2-deoxy Guanosine EIA Standard

07/07/2010

Vapors can travel to a source of ignition and flash back.

**Hazardous Combustion Products:** No data available.

**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.

**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

### 6. Accidental Release Measures

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid breathing vapors and provide adequate ventilation.  
Remove all sources of ignition.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

### 7. Handling and Storage

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
Avoid prolonged or repeated exposure.  
Keep away from sources of ignition.  
Prevent the build up of electrostatic charge.

**Precautions To Be Taken in Storing:** Keep away from heat, sparks, and flame.  
Keep tightly closed.  
Store at correct temperature.

**Other Precautions:** Hygroscopic.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. 8-hydroxy-2-deoxy Guanosine	NA	No data.	No data.	No data.
2. Ethyl alcohol	64-17-5	1000 ppm	1000 ppm	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

### 9. Physical and Chemical Properties

**Physical States:** [ ] Gas [ X ] Liquid [ ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** 363.00 C

**Flash Pt:** 14.00 C Method Used: Closed Cup

**Explosive Limits:** LEL: 3.3% at 25.0 C UEL: 19% at 25.0 C

**Specific Gravity (Water = 1):** No data.

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine EIA Standard**

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<b>Bulk density:</b>	No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	43 MM_HG at 20.0 C
<b>Vapor Density (vs. Air = 1):</b>	No data.
<b>Evaporation Rate (vs Butyl Acetate=1):</b>	No data.
<b>Solubility in Water:</b>	No data.
<b>Percent Volatile:</b>	No data.
<b>Heat Value:</b>	No data.
<b>Particle Size:</b>	No data.
<b>Corrosion Rate:</b>	No data.
<b>pH:</b>	No data.
<b>Appearance and Odor:</b>	No data available.

### 10. Stability and Reactivity

<b>Stability:</b>	Unstable [ ] Stable [ X ]
<b>Conditions To Avoid - Instability:</b>	heat, flames and sparks
<b>Incompatibility - Materials To Avoid:</b>	alkali metals ammonia peroxides strong oxidizing agents
<b>Hazardous Decomposition Or Byproducts:</b>	carbon dioxide carbon monoxide
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [ X ]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

### 11. Toxicological Information

<b>:</b>	The toxicological effects of this product have not been thoroughly studied.
<b>Chronic Toxicological Effects:</b>	Ethanol - Toxicity Data: Oral LD50 (rat): 7,060 mg/kg; Inhalation LC50 (rat): 20,000 ppm (10h); Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit) 20mg (24h) moderate; Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information. Ethanol RTECS Number: KQ6300000
<b>Carcinogenicity/Other Information:</b>	No data available.
<b>Carcinogenicity:</b>	NTP? No IARC Monographs? No OSHA Regulated? No

### 12. Ecological Information

<b>:</b>	Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
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### 13. Disposal Considerations

<b>Waste Disposal Method:</b>	Dispose in accordance with local, state, and federal regulations.
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### 14. Transport Information

<b>LAND TRANSPORT (US DOT)</b>	
<b>DOT Proper Shipping Name</b>	Ethyl alcohol solution
<b>DOT Hazard Class:</b>	3
<b>DOT Hazard Label:</b>	FLAMMABLE LIQUID
<b>UN/NA Number:</b>	1170
<b>Packing Group:</b>	II
<b>LAND TRANSPORT (European ADR/RID)</b>	
<b>ADR/RID Shipping Name</b>	Ethyl alcohol solution
<b>UN Number:</b>	1170

**MATERIAL SAFETY DATA SHEET**  
**8-hydroxy-2-deoxy Guanosine EIA Standard**

07/07/2010

**Packing Group:** II  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Shipping Name** Ethyl alcohol solution  
**UN Number:** 1170  
**Packing Group:** II  
**IATA Classification:** 3  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

**15. Regulatory Information**

**European Community Hazard Symbol codes** F: Highly Flammable

**European Community Risk and Safety Phrases**

- R11 - Highly flammable.
- S7 - Keep container tightly closed.
- S16 - Keep away from sources of ignition.

**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. 8-hydroxy-2-deoxy Guanosine	NA	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. 8-hydroxy-2-deoxy Guanosine	NA	HAP, ODC ()	No	No	
2. Ethyl alcohol	64-17-5	HAP, ODC ()	No	Inventory	

**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

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**N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required**