Product Information



Precoated EIA 96-Well Plate (solid or strip) Item No. 400004, 400005, 400006, 400007, 400008, or 400009

COMMENTS:

Each plate is coated with antibody. This Safety Data Sheet (SDS) is for the antibody only. An SDS 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.

Copyright Cayman Chemical Company

Revision Date: 12/21/2012 Supercedes Revision: 08/27/2010

Cayman Chemical

Mailing address

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

Phone

(800) 364-9897 (734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com



Page: 1

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

Revision: 09/13/2012

Supercedes Revision: 05/01/2012

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 400035

Product Name:Polysorbate 20Synonyms:Tween 20^{TM} ;

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact:CHEMTREC Within USA and Canada:+1 (800)424-9300Alternate Emergency Contact:CHEMTREC Outside USA and Canada:+1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable

according to GHS.

GHS Precaution Phrases: No data available.

GHS Response Phrases: No data available.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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.

Target Organs: No data available.

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

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS#
Polyoxyethylene (20) sorbitan monolaurate	9005-64-5	100.0 %	500-018-3	No phrases apply.	TR7400000
(Tween 20™)					

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes

examined and tested by medical personnel.



Page: 2

Revision: 09/13/2012 Supercedes Revision: 05/01/2012

In Case of Ingestion:

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.

Indication of any immediate medical attention and special treatment needed:

No data available.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

Accidental Release Measures

Protective Precautions, Protective Avoid raising and breathing dust, and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Contain spill and collect, as appropriate.

Released Or Spilled:

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
Polyoxyethylene (20) sorbitan monolaurate (Tween 20™)	9005-64-5	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
Polyoxyethylene (20) sorbitan monolaurate (Tween 20 TM)	9005-64-5	No data.	No data.	No data.

Protective Equipment Summary - Hazard

Label Information:

glasses Safety shower in work area Vent Hood

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat



Page: 3

Revision: 09/13/2012 Supercedes Revision: 05/01/2012

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

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.

Environmental Exposure Controls: No data available.

Physical and Chemical Properties						
Information on Basic Physical and Chemical Pr	operties					
Physical States:	[] Gas [X]	Liquid [] Solid				
Appearance and Odor:	A clear, yellow vi	scous liquid				
Melting Point:	No data.					
Boiling Point:	No data.					
Flash Pt:	No data.					
Evaporation Rate:	No data.					
Vapor Pressure (vs. Air or mm Hg):	No data.					
Vapor Density (vs. Air = 1):	No data.					
Specific Gravity (Water = 1):	No data.					
Solubility in Water:	No data.					
Autoignition Pt:	No data.					
Explosive Properties:	No data available					
Oxidizing Properties:	No data available					
Other Information						
Percent Volatile:	N.A.					
	10. Stabili	ity and Reac	tivity			
Reactivity:	No data available	•	-			
Stability:	Unstable []	Stable [X]				
Stability Note(s):	Stable if stored in	accordance with info	ormation listed on the	product insert.		
Conditions To Avoid:	No data available					
Polymerization:	Will occur []	Will not occur [X]			
Incompatibility - Materials To Avoid:	strong oxidizing a	igents				
Hazardous Decomposition Or Byproducts:	carbon dioxide					
·	carbon monoxide					
1	1. Toxicol	ogical Inforn	nation			
Toxicological Information:	The toxicological	effects of this produc	ct have not been thoro	ughly studied.		
•	Polysorbate 20 - Toxicity Data: Oral LD50 (rat): 36.7 ml/kg; Oral LD50 (hamster): 18 ml/kg; Oral LD50 (mouse): >33 g/kg; Irritation Data: Skin (human): 15 mg/3D mild; Polysorbate 20 - Investigated as a tumorigen and reproductive effector.					
	Only select Regis See actual entry in	-	of Chemical Substance te information.		esented here.	
Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA	
 Polyoxyethylene (20) sorbitan monolaurate (Tween 20™) 	9005-64-5	n.a.	n.a.	n.a.	n.a.	



Revision: 09/13/2012

Page: 4

Supercedes Revision: 05/01/2012

NTP? No IARC Monographs? No OSHA Regulated? No Carcinogenicity: 12. Ecological Information **General Ecological Information:** Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. 13. Disposal Considerations Dispose in accordance with local, state, and federal regulations. **Waste Disposal Method:** 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

- 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
Γ	Polyoxyethylene (20) sorbitan monolaurate	9005-64-5	No	No	No	No
	(Tween 20™)					

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Polyoxyethylene (20) sorbitan monolaurate	9005-64-5	No	No	Inventory	No
(Tween 20™)					

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 09/13/2012

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



SAFETY DATA SHEET EIA Tracer Dye

Page: 1

Revision: 09/19/2012 Supercedes Revision: 05/03/2012

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



1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 400040

Product Name: EIA Tracer Dye

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

Hazards Identification						
GHS Classification Placard Key word GHS Hazard						
Serious Eye Damage/Eye Irritation, Category	Exclamation	Warning	Causes serious eye irritation			
2A	point					
Skin Corrosion/Irritation, Category 2	Exclamation	Warning	Causes skin irritation			
	point					

GHS Hazard Phrases: H319: Causes serious eye irritation

H315: Causes skin irritation.

GHS Precaution Phrases: P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/clothing and eye/face protection as specified by the

manufacturer/supplier or the competent authority.

GHS Response Phrases: P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists, get medical advice/attention. P302+352: IF ON SKIN: Wash with plenty of soap and water. P332+313: If skin irritation occurs, get medical advice/attention. P362: Take off contaminated clothing and wash before re-use.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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

Potential Health Effects (Acute and Chronic): Irritating to eyes and skin.

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 respiratory system irritation.

May temporarily stain skin.

Target Organs: No data available.

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:



SAFETY DATA SHEETEIA Tracer Dye

Page: 2

Revision: 09/19/2012 Supercedes Revision: 05/03/2012

3. Composition/Information on Ingredients					
Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	
1. EIA Tracer Dye	NA	100.0 %	NA	R36/38	

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: 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 Ingestion: 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.

Indication of any immediate medical attention and special treatment needed:

No data available.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

6. Accidental Release Measures

Protective Precautions, Protective

Avoid breathing vapors and provide adequate ventilation.

Equipment and Emergency Procedures:

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).

Environmental Precautions:

Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Released Or Spilled:

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing:

Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information:

Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.



Polymerization:

Incompatibility - Materials To Avoid:

SAFETY DATA SHEETEIA Tracer Dye

Page: 3

Revision: 09/19/2012 Supercedes Revision: 05/03/2012 8. Exposure Controls/Personal Protection **Hazardous Components (Chemical Name)** CAS# **OSHA PEL ACGIH TLV** Other Limits **EIA Tracer Dye** NA No data. No data. No data. **Hazardous Components (Chemical Name)** CAS# **Britain EH40** France VL Europe EIA Tracer Dye NA No data. No data. No data. **Protective Equipment Summary - Hazard** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety **Label Information:** glasses Safety shower in work area Vent Hood **Engineering Controls (Ventilation etc.):** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. **Eye Protection:** Safety glasses **Protective Gloves:** Compatible chemical-resistant gloves Other Protective Clothing: Lab coat Respiratory Equipment (Specify Type): NIOSH approved respirator, as conditions warrant. 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. **Environmental Exposure Controls:** No data available. Physical and Chemical Properties Information on Basic Physical and Chemical Properties **Physical States:** [] Gas [] Solid [X] Liquid Appearance and Odor: A red solution **Melting Point:** No data. **Boiling Point:** No data. Flash Pt: No data. **Evaporation Rate:** No data. Vapor Pressure (vs. Air or mm Hg): No data. Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. Solubility in Water: No data. **Autoignition Pt:** No data. **Explosive Properties:** No data available. **Oxidizing Properties:** No data available. Other Information Percent Volatile: No data. 10. Stability and Reactivity Reactivity: No data available. Stability: Unstable [] Stable [X] Stability Note(s): Stable if stored in accordance with information listed on the product insert. **Conditions To Avoid:** No data available.

Will occur []

No data available.

Will not occur [X]



SAFETY DATA SHEET **EIA Tracer Dye**

Page: 4

Revision: 09/19/2012

Supercedes Revision: 05/03/2012

Hazardous Decomposition Or Byproducts: No data available. 11. Toxicological Information **Toxicological Information:** The toxicological effects of this product have not been thoroughly studied. **Chronic Toxicological Effects:** No data available. **ACGIH Hazardous Components (Chemical Name)** CAS# NTP IARC **OSHA** 1. EIA Tracer Dye NA n.a. n.a. n.a. n.a. Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No 12. Ecological Information **General Ecological Information:** Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. Disposal Considerations Dispose in accordance with local, state, and federal regulations. **Waste Disposal Method:** 14. Transport Information

Globally Harmonized System of Classification and Labelling

Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

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

European Community Risk and Safety Phrases

R36/38 - Irritating to eyes and skin.

S24/25 - Avoid contact with skin and eyes.

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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. EIA Tracer Dye	NA	No	No	No	No
Other US EPA or State Lists	,				

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. EIA Tracer Dye	NA	No	No	No	No
Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008,				

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 09/19/2012

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Page: 1

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

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



1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 400042

Product Name: EIA Antiserum Dye

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

CHEMTREC Within USA and Canada: **Emergency Contact:** +1 (800)424-9300 **Alternate Emergency Contact:** CHEMTREC Outside USA and Canada: +1 (703)527-3887

+1 (734)971-3335 Information: Cayman Chemical Company

Web site address: www.caymanchem.com

GHS Classification	Placard	Key word	GHS Hazard
Carcinogenicty, Category 1B	Health hazard	Danger	May cause cancer

GHS Hazard Phrases: H350: May cause cancer.

GHS Precaution Phrases: P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P281: Use personal protective equipment as required.

GHS Response Phrases: P308+313: IF exposed or concerned: Get medical attention/advice.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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 mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

May cause cancer.

May cause eye, skin, or respiratory system irritation.

Target Organs: No data available.

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

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3 Composition/Information on Ingredients

o. Composition/information on ingrodiente				
Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases
EIA Antiserum Dye	NA	100.0 %	NA	R45

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.



Page: 2

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

In Case of Eye Contact: 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 Ingestion: 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.

Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Hazardous Combustion Products: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Fire Fighting Instructions: 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.

Accidental Release Measures

Protective Precautions, Protective Avoid breathing vapors and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Contain spill and collect, as appropriate.

Released Or Spilled:

Transfer to a chemical waste container for disposal in accordance with local regulations.

Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
EIA Antiserum Dye	NA	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	
EIA Antiserum Dye	NA	No data.	No data.	

Protective Equipment Summary - Hazard

Label Information:

glasses Safety shower in work area Vent Hood

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

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



Page: 3

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

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. I	hysical and	d Chemical I	Properties		
Information on Basic Physical and Chemical	Properties				
Physical States:	[] Gas [X]	Liquid [] Solid			
Appearance and Odor:	A blue solution				
Boiling Point:	No data.				
Melting Point:	No data.				
Autoignition Pt:	No data.				
Flash Pt:	No data.				
Specific Gravity (Water = 1):	No data.				
Vapor Pressure (vs. Air or mm Hg):	No data.				
Vapor Density (vs. Air = 1):	No data.				
Evaporation Rate:	No data.				
Solubility in Water:	No data.				
Other Information					
Percent Volatile:	No data.				
	10. Stabili	ity and Reac	tivity		
Stability:	Unstable []	Stable [X]			
Stability Note(s):	Stable if stored in	accordance with info	ormation listed on the	product insert.	
Conditions To Avoid:	No data available				
Polymerization:	Will occur []	Will not occur [X]		
Incompatibility - Materials To Avoid:	strong oxidizing a	agents			
Hazardous Decomposition Or Byproducts:	No data available	•			
	11. Toxicol	logical Inforn	nation		
Toxicological Information:	The toxicological	effects of this produc	ct have not been thoro	ughly studied.	
Chronic Toxicological Effects:	Contains a compo	onent that has been in	vestigated as a carcino	ogen.	
Carcinogenicity/Other Information:	-	onent that has been re NTP, or EPA classific		carcinogenic based or	ı its IARC,
Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
EIA Antiserum Dye	NA	n.a.	n.a.	n.a.	n.a.
	12. Ecolo	gical Informa	ation		
General Ecological Information:		o the environment. control or dilution wa	ater may cause pollution	on.	
	13. Dispos	al Considera	ations		
Waste Disposal Method:	Dispose in accord	lance with local, state	e, and federal regulation	ons.	



Page: 4

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

14. Transport Information

Globally Harmonized System of Classification and Labelling

Carcinogenicty, Category 1B - Danger! May cause cancer

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 T: Toxic; Carcinogenic Hazard: 2

European Community Risk and Safety Phrases

R45 - May cause cancer.

S24/25 - Avoid contact with skin and eyes.

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

In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)

S53 - Avoid exposure - obtain special instructions before use.

US EPA SARA Title III

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

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
EIA Antiserum Dye	NA	No	No	No	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Page: 1

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

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





1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 400050

Product Name: Ellman's Reagent

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Web site address:

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

www.caymanchem.com

Information: Cayman Chemical Company

Hazards Identification **GHS Classification** Placard Key word **GHS Hazard** Skin Corrosion/Irritation, Category 2 Exclamation Causes skin irritation Warning point Serious Eye Damage/Eye Irritation, Category Exclamation Warning Causes serious eye irritation point Target Organ Systemic Toxicity (single Exclamation Warning May cause respiratory irritation, or may cause drowsiness exposure), Category 3 and dizziness point Acute Toxicity: Skin, Category 3 Skull and Danger Toxic in contact with skin crossbones Acute Toxicity: Oral, Category 3 Toxic if swallowed Skull and Danger crossbones

GHS Hazard Phrases: H311: Toxic in contact with skin.

H301: Toxic if swallowed.H315: Causes skin irritation.H319: Causes serious eye irritationH335: May cause respiratory irritation.

GHS Precaution Phrases: P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/clothing and eye/face protection as specified by the

manufacturer/supplier or the competent authority.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

GHS Response Phrases: P302+352: IF ON SKIN: Wash with plenty of soap and water.

P332+313: If skin irritation occurs, get medical advice/attention. P362: Take off contaminated clothing and wash before re-use.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

+1 (734)971-3335

lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irritation persists, get medical advice/attention.

P309+311: Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing.

P361: Remove/Take off immediately all contaminated clothing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P363: Wash contaminated clothing before reuse.

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.



Ellman's Reagent

Revision: 05/01/2012

Page: 2

Supercedes Revision: 07/06/2010

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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

Potential Health Effects (Acute and Chronic): Causes skin and serious eye irritation.

Material may be irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation.

May cause respiratory system irritation. Toxic if swallowed or in contact with skin.

Target Organs: No data available.

Signs and Symptoms Of Exposure: Ingestion of large amounts can cause abdominal pain, lowered blood pressure, nausea, and

vomiting.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

Composition/Information on Ingredients							
Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS #		
1. 5,5'-Dithiobis(2-nitrobenzoic acid)	69-78-3	1.0 -5.0 %	200-714-4	R36/37/38	DG9650000		
2. Acetylthiocholine iodide	1866-15-5	1.0 -5.0 %	217-474-1	R21-25-36/37/38	FZ9865000		
3. Sodium chloride	7647-14-5	5.0 -10.0 %	231-598-3	No phrases apply.	VZ4725000		
4. Potassium phosphate, dibasic	7758-11-4	45.0 -55.0 %	231-834-5	No phrases apply.	TC5580000		
Potassium phosphate, Monobasic	7778-77-0	35.0 -45.0 %	231-913-4	No phrases apply.	TC6615500		

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: 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 Ingestion: 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.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Hazardous Combustion Products: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Fire Fighting Instructions: 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.



Page: 3

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

6. Accidental Release Measures

Protective Precautions, Protective Avoid raising and breathing dust, and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Contain spill and collect, as appropriate.

Released Or Spilled:

Transfer to a chemical waste container for disposal in accordance with local regulations.

Handling and Storage

Avoid breathing dust/fume/gas/mist/vapours/spray. Precautions To Be Taken in Handling:

Avoid prolonged or repeated exposure.

Keep container tightly closed. Precautions To Be Taken in Storing:

Store in accordance with information listed on the product insert.

Other Precautions: Protect from light.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection CAS# **OSHA PEL ACGIH TLV** Other Limits **Hazardous Components (Chemical Name)** 5,5'-Dithiobis(2-nitrobenzoic acid) 69-78-3 No data. No data. No data. 2. Acetylthiocholine iodide 1866-15-5 No data. No data. No data. 3. Sodium chloride 7647-14-5 No data. No data. No data. Potassium phosphate, dibasic 7758-11-4 No data. No data. No data. 7778-77-0 5. Potassium phosphate, Monobasic No data. No data. No data. **Hazardous Components (Chemical Name)** CAS# **Britain EH40** France VL 5,5'-Dithiobis(2-nitrobenzoic acid) 69-78-3 No data. No data. 1866-15-5 Acetylthiocholine iodide No data. No data. 7647-14-5 No data. Sodium chloride No data. 4. Potassium phosphate, dibasic 7758-11-4 No data. No data. Potassium phosphate, Monobasic 7778-77-0 No data. No data.

Protective Equipment Summary - Hazard

Compatible chemical-resistant gloves Label Information:

Eye wash station in work area Lab coat Safety

Safety shower in work area Vent Hood

Engineering Controls (Ventilation etc.):

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

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

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

Information on Basic Physical and Chemical Properties

Physical States: [] Liquid [X] Solid

Appearance and Odor: A lyophilized powder

Boiling Point: No data.



Page: 4

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

Melting Point: No data. **Autoignition Pt:** No data. Flash Pt: No data. Specific Gravity (Water = 1): No data. Vapor Pressure (vs. Air or mm Hg): No data. Vapor Density (vs. Air = 1): No data. **Evaporation Rate:** No data. Solubility in Water: No data. Other Information **Percent Volatile:** No data. 10. Stability and Reactivity Stability: Stability Note(s): Stable if stored in accordance with information listed on the product insert. **Conditions To Avoid:** No data available. Polymerization: Will occur [] Will not occur [X] Incompatibility - Materials To Avoid: strong bases strong oxidizing agents **Hazardous Decomposition Or Byproducts:** carbon dioxide carbon monoxide hydrogen chloride gas hydrogen iodide nitrogen oxides phosphorus oxides potassium oxides sodium oxides sulfur oxides 11. Toxicological Information **Toxicological Information:** The toxicological effects of this product have not been thoroughly studied. Acetylthiocholine iodide - Toxicity Data: Oral LD50 (rat): 100 mg/kg; Skin LD50 (guinea pig): 500 mg/kg; Potassium phosphate, monobasic - Toxicity Data: Oral LDLO (rat): 4,640 mg/kg; Skin LD50 (rabbit): >4,640 mg/kg; **Chronic Toxicological Effects:** Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information. Acetylthiocholine iodide RTECS Number: FZ9865000 Potassium phosphate, monobasic RTECS Number: TC6615500 CAS# NTP **IARC ACGIH OSHA Hazardous Components (Chemical Name)** 5,5'-Dithiobis(2-nitrobenzoic acid) 69-78-3 n.a. n.a. n.a. n.a. Acetylthiocholine iodide 1866-15-5 n.a. n.a. n.a. n.a. 3. Sodium chloride 7647-14-5 n.a. n.a. n.a. n.a. n.a. Potassium phosphate, dibasic 7758-11-4 n.a. n.a. n.a. Potassium phosphate, Monobasic 7778-77-0 n.a. n.a. n.a. n.a.



Page: 5

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

12. Ecological Information

General 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

Globally Harmonized System of Classification and Labelling

Skin Corrosion/Irritation, Category 2 - Warning! Causes skin irritation

Serious Eye Damage/Eye Irritation, Category 2A - Warning! Causes serious eye irritation

Target Organ Systemic Toxicity (single exposure), Category 3 - Warning! May cause respiratory irritation, or may cause drowsiness and dizziness

Acute Toxicity: Skin, Category 3 - Danger! Toxic in contact with skin Acute Toxicity: Oral, Category 3 - Danger! Toxic if swallowed

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 T: Toxic

European Community Risk and Safety Phrases

R21 - Harmful in contact with skin.

R25 - Toxic if swallowed.

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

S24/25 - Avoid contact with skin and eyes.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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. 5,5'-Dithiobis(2-nitrobenzoic acid)	69-78-3	No	No	No	No
Acetylthiocholine iodide	1866-15-5	No	No	No	No
3. Sodium chloride	7647-14-5	No	No	No	No
4. Potassium phosphate, dibasic	7758-11-4	No	No	No	No
5. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. 5,5'-Dithiobis(2-nitrobenzoic acid)	69-78-3	No	No	Inventory	No
2. Acetylthiocholine iodide	1866-15-5	No	No	Inventory	No
3. Sodium chloride	7647-14-5	No	No	Inventory	No
4. Potassium phosphate, dibasic	7758-11-4	No	No	Inventory	No
5. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008,

and European Directive 67/548/EEC as amended.



Page: 6

Revision: 05/01/2012 Supercedes Revision: 07/06/2010

16. Other Information

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

Page: 1

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

Revision: 09/13/2012

Supercedes Revision: 05/01/2012

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 400062

Product Name: Wash Buffer Concentrate (400X)

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable

according to GHS.

GHS Precaution Phrases: No data available.

GHS Response Phrases: No data available.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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.

Target Organs: No data available.

Signs and Symptoms Of Exposure: Ingestion of large amounts can cause abdominal pain, lowered blood pressure, nausea, and

vomiting.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Composition/Information on Ingredients **Hazardous Components (Chemical Name)** CAS# Concentration EC# RTECS# **Risk Phrases** 1. Potassium phosphate, dibasic 7758-11-4 53.0 % 231-834-5 No phrases apply. TC5580000 Potassium phosphate, Monobasic 7778-77-0 12.9 % 231-913-4 No phrases apply. TC6615500 3. Water 7732-18-5 34.1 % 231-791-2 No phrases apply. ZC0110000

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes

examined and tested by medical personnel.



Wash Buffer Concentrate (400X)

Revision: 09/13/2012

Page: 2

Supercedes Revision: 05/01/2012

Wash out mouth with water provided person is conscious. Never give anything by mouth to an In Case of Ingestion: unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by

medical personnel.

Indication of any immediate medical attention and special treatment needed: No data available.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

Accidental Release Measures

Protective Precautions, Protective Avoid breathing vapors and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Contain spill and collect, as appropriate.

Released Or Spilled:

Transfer to a chemical waste container for disposal in accordance with local regulations.

Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
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.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
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 glasses Safety shower in work area

Eye wash station in work area Lab coat

Safety

Engineering Controls (Ventilation etc.):

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

Vent Hood

levels below recommended exposure limits.

Eye Protection: Safety glasses



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

Page: 3

Revision: 09/13/2012 Supercedes Revision: 05/01/2012

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

Hazardous Components (Chemical Name)

1. Potassium phosphate, dibasic

2. Potassium phosphate, Monobasic

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

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.

Environmental Exposure Controls: No data available.

Physical and Chemical Properties								
Information on Basic Physical and Chemical Properties								
Physical States:	[] Gas [X] Liquid [] Solid							
Appearance and Odor:	A clear, colorless solution							
pH:	7.4							
Melting Point:	No data.							
Boiling Point:	No data.							
Flash Pt:	No data.							
Evaporation Rate:	No data.							
Vapor Pressure (vs. Air or mm Hg):	No data.							
Vapor Density (vs. Air = 1):	No data.							
Specific Gravity (Water = 1):	No data.							
Solubility in Water:	No data.							
Autoignition Pt:	No data.							
Explosive Properties:	No data available.							
Oxidizing Properties:	No data available.							
Other Information								
Percent Volatile:	No data.							
10. Stability and Reactivity								
Reactivity:	No data available.							
Stability:	Unstable [] Stable [X]							
Stability Note(s):	Stable if stored in accordance with information listed on the product insert.							
Conditions To Avoid:	No data available.							
Polymerization:	Will occur [] Will not occur [X]							
Incompatibility - Materials To Avoid:	strong oxidizing agents							
Hazardous Decomposition Or Byproducts:	phosphorus oxides potassium oxides							
	11. Toxicological Information							
Toxicological Information:	The toxicological effects of this product have not been thoroughly studied.							
Chronic Toxicological Effects:	No data available.							

CAS#

7758-11-4

7778-77-0

NTP

n.a.

IARC

n.a.

ACGIH

n.a.

n.a.

OSHA

n.a.



SAFETY DATA SHEETWash Buffer Concentrate (400X)

Page: 4

Revision: 09/13/2012

Supercedes Revision: 05/01/2012

Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
3. Water	7732-18-5	n.a.	n.a.	n.a.	n.a.
Carcinogenicity:	NTP? No IA	RC Monographs? No	OSHA Regulat	ed? No	_

12. Ecological Information

General 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 NameNot 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
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

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Potassium phosphate, dibasic	7758-11-4	No	No	Inventory	No
2. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No
3. Water	7732-18-5	No	No	Inventory	No

Regulatory Information Statement: This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

Other Information

Revision Date: 09/13/2012

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Leukotriene B4 Express EIA Monoclonal

Antibody

+1 (734)971-3335

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

Revision: 01/11/2013

Page: 1

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 10009434

Product Name: Leukotriene B4 Express EIA Monoclonal Antibody Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Web site address:

Company Name: Cayman Chemical Company

CHEMTREC Within USA and Canada: **Emergency Contact:** +1 (800)424-9300 **Alternate Emergency Contact:** CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company

www.caymanchem.com

Hazards Identification

Based on evaluation of currently available data this substance or mixture is not classifiable **GHS Hazard Phrases:**

according to GHS.

GHS Precaution Phrases: No data available. **GHS Response Phrases:** No data available.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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

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.

Target Organs: No data available.

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Composition/Information on Ingredients EC# **Hazardous Components (Chemical Name)** CAS# Concentration **Risk Phrases** RTECS# 1. Leukotriene B4 Express EIA Monoclonal NA NA 99.99 % No phrases apply. NA Antibody 26628-22-8 0.01 % Sodium azide 247-852-1 R28-32-50/53 VY8050000

First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: 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 Ingestion: 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.



Leukotriene B4 Express EIA Monoclonal

Page: 2

Revision: 01/11/2013

Antibody Indication of any immediate medical No data available.

attention and special treatment needed:

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

Accidental Release Measures

Protective Precautions, Protective Avoid raising and breathing dust, and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Released Or Spilled:

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

8. Exposure Controls/Personal Protection

Wash thoroughly after handling.

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TWA	Other Limits
Leukotriene B4 Express EIA Monoclonal	NA	No data.	No data.	No data.
Antibody				
2. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
Leukotriene B4 Express EIA Monoclonal	NA	No data.	No data.	No data.
Antibody	l			

Sodium azide 26628-22-8 TWA: 0.1 mg/m3 () TWA: 0.1 mg/m3 TWA: 0.1 STEL: 0.3 mg/m3 () STEL: 0.3 mg/m3 mg/m3 STEL: 0.3 ma/m3

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

Engineering Controls (Ventilation etc.):

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves



Leukotriene B4 Express EIA Monoclonal Antibody

Revision: 01/11/2013

Page: 3

Other Protective Clothing: Lab coat

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

Work/Hygienic/Maintenance Practices: Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash and a safety

shower.

Wash thoroughly after handling.

Environmental Exposure Controls: No data available.

9. F	Physical and	d Chem	ical Propertie	es	
Information on Basic Physical and Chemical F	Properties				
Physical States:	[] Gas [] L	Liquid [X	[] Solid		
Appearance and Odor:	A lyophilized pov	wder			
Melting Point:	No data.				
Boiling Point:	No data.				
Flash Pt:	No data.				
Evaporation Rate:	No data.				
Vapor Pressure (vs. Air or mm Hg):	No data.				
Vapor Density (vs. Air = 1):	No data.				
Specific Gravity (Water = 1):	No data.				
Solubility in Water:	No data.				
Autoignition Pt:	No data.				
Explosive Properties:	No data available				
Oxidizing Properties:	No data available				
Other Information					
Percent Volatile:	No data.				
	10. Stabili	ity and I	Reactivity		
Reactivity:	No data available				
Stability:	Unstable []	Stable [X]			
Stability Note(s):	Stable if stored in	accordance	with information listed	on the product insert.	
Conditions To Avoid:	No data available				
Polymerization:	Will occur []	Will not oo	ccur [X]		
Incompatibility - Materials To Avoid:	No data available				
Hazardous Decomposition Or Byproducts:	No data available				
	11. Toxicol	logical I	nformation		
Toxicological Information:	The toxicological	effects of thi	is product have not bee	n thoroughly studied.	
Chronic Toxicological Effects:	No data available				
Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Leukotriene B4 Express EIA Monoclonal Antibody	NA	n.a.	n.a.	n.a.	n.a.



Leukotriene B4 Express EIA Monoclonal Antibody Page: 4

Revision: 01/11/2013

	J		
12. Ecological Information			
General 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
Leukotriene B4 Express EIA Monoclonal	NA	No	No	No	No
Antibody					
2. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Leukotriene B4 Express EIA Monoclonal	NA	No	No	No	No
Antibody					
2. Sodium azide	26628-22-8	No	No	Inventory	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 01/11/2013

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Page: 1

Revision: 01/11/2013

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

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 10009435

Product Name: Leukotriene B4 Express AChE Tracer

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable

according to GHS.

GHS Precaution Phrases: No data available.

GHS Response Phrases: No data available.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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.

Target Organs: No data available.

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Com	position/Ir	nformation o	n Ingredients	
	040#	0	E0#	i

Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS#
Leukotriene B4 Express AChE Tracer	NA	99.99 %	NA	No phrases apply.	NA
2. Sodium azide	26628-22-8	0.01 %	247-852-1	R28-32-50/53	VY8050000

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: 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 Ingestion: 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.



Page: 2

Revision: 01/11/2013

Indication of any immediate medical attention and special treatment needed:

No data available.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

6. Accidental Release Measures

Protective Precautions, Protective Avoid raising and breathing dust, and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Released Or Spilled:

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

 $\textbf{Precautions To Be Taken in Handling:} \qquad \qquad \text{Avoid breathing dust/fume/gas/mist/vapours/spray.}$

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8.	Exposure	Controls/	Personal	Protection
----	----------	-----------	----------	------------

Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TWA	Other Limits
Leukotriene B4 Express AChE Tracer	NA	No data.	No data.	No data.
2. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
Leukotriene B4 Express AChE Tracer	NA	No data.	No data.	No data.
2. Sodium azide	26628-22-8	TWA: 0.1 mg/m3 ()	TWA: 0.1 mg/m3	TWA: 0.1
		STEL: 0.3 mg/m3 ()	STEL: 0.3 mg/m3	mg/m3
				STEL: 0.3
				mg/m3

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

Engineering Controls (Ventilation etc.):Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat



Page: 3

Revision: 01/11/2013

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

Work/Hygienic/Maintenance Practices: Do not take internally.

Facilities storing or utilizing this material should be equipped with an eyewash and a safety

shower.

Wash thoroughly after handling.

Environmental Exposure Controls: No data available.

Physical and Chemical Properties					
Information on Basic Physical and Chemical P	roperties				
Physical States:	[] Gas [] L	iquid [X] Solid			
Appearance and Odor:	A lyophilized pow	/der			
Melting Point:	No data.				
Boiling Point:	No data.				
Flash Pt:	No data.				
Evaporation Rate:	No data.				
Vapor Pressure (vs. Air or mm Hg):	No data.				
Vapor Density (vs. Air = 1):	No data.				
Specific Gravity (Water = 1):	No data.				
Solubility in Water:	No data.				
Autoignition Pt:	No data.				
Explosive Properties:	No data available.				
Oxidizing Properties:	No data available.				
Other Information					
Percent Volatile:	No data.				
	10. Stabili	ty and Reac	ti∨ity		
Reactivity:	No data available.				
Stability:	Unstable []	Stable [X]			
Stability Note(s):	Stable if stored in	accordance with info	ormation listed on the	product insert.	
Conditions To Avoid:	No data available.				
Polymerization:	Will occur []	Will not occur [X]		
Incompatibility - Materials To Avoid:	No data available.				
Hazardous Decomposition Or Byproducts:	No data available.				
,	11. Toxicol	ogical Inform	nation		
Toxicological Information:	The toxicological	effects of this produc	ct have not been thoro	oughly studied.	
Chronic Toxicological Effects:	No data available.				
Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Leukotriene B4 Express AChE Tracer	NA	n.a.	n.a.	n.a.	n.a.
2. Sodium azide	26628-22-8	n.a.	n.a.	A4	n.a.
	12. Ecolo	gical Informa	ation		
General Ecological Information: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.					



Page: 4

Revision: 01/11/2013

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 NameNot 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
Leukotriene B4 Express AChE Tracer	NA	No	No	No	No
2. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Leukotriene B4 Express AChE Tracer	NA	No	No	No	No
2. Sodium azide	26628-22-8	No	No	Inventory	No

Regulatory Information Statement: This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008,

and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 01/11/2013

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Page: 1

Revision: 01/11/2013

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



1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 10009436

Product Name: Leukotriene B4 Express Standard

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Information:

Company Name: Cayman Chemical Company

CHEMTREC Within USA and Canada: **Emergency Contact:** +1 (800)424-9300 **Alternate Emergency Contact:** CHEMTREC Outside USA and Canada: +1 (703)527-3887

Cayman Chemical Company Web site address:

www.caymanchem.com

2. Hazards Identification					
GHS Classification Placa		Key word	GHS Hazard		
Flammable Liquids, Category 2	Flame	Danger	Highly flammable liquid and vapor		

GHS Hazard Phrases: H225: Highly flammable liquid and vapor

GHS Precaution Phrases: P210: Keep away from {heat/sparks/open flames/hot surfaces}. - No smoking.

P280: Wear protective gloves/clothing and eye/face protection as specified by the

+1 (734)971-3335

manufacturer/supplier or the competent authority.

GHS Response Phrases: P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing.

Rinse skin with water/shower.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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

Potential Health Effects (Acute and Chronic): Causes eye, skin, or respiratory system irritation.

Material is irritating to the mucous membranes and upper respiratory tract.

May be harmful by inhalation, ingestion, or skin absorption.

Target Organs: Central nervous system, Blood, Eyes, Reproductive system, Heart, Respiratory system, Liver,

Skin.

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

Signs and Symptoms Of Exposure: Irritating to eyes, skin, nose; may cause anemia, cough, CNS depression, drowsiness, headache,

heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects,

teratogenic effects.

To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Composition/Information on Ingredients						
Hazardous Components (Chemical Name) CAS # Concentration EC# Risk Phrases RTECS					RTECS#	
1. Leukotriene B4	71160-24-2	< 0.01 %	NA	R36/37/38	JX3852000	
2. Ethyl alcohol	64-17-5	>99.99 %	200-578-6	R11	KQ6300000	



Page: 2

Revision: 01/11/2013

4. First Aid Measures

Emergency and First Aid Procedures:

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained In Case of Inhalation:

personnel. Get immediate medical attention.

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.

In Case of Eye Contact: 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 Ingestion: 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.

Indication of any immediate medical attention and special treatment needed: No data available.

5. Fire Fighting Measures

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.

Flammable Properties and 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.

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

Flash Pt: 14.00 C Method Used: Closed Cup

Autoignition Pt: 363.00 C

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

Accidental Release Measures

Protective Precautions, Protective

Avoid breathing vapors and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Released Or Spilled:

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

> Avoid prolonged or repeated exposure. Keep away from sources of ignition.

Take precautionary measures against static discharge.

Precautions To Be Taken in Storing: Keep away from heat, sparks, and flame.

Keep container tightly closed.

Store in accordance with information listed on the product insert.



Page: 3

Revision: 01/11/2013

Other Precautions: Hygroscopic.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection						
Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits		
Leukotriene B4	71160-24-2	No data.	No data.	No data.		
2. Ethyl alcohol	64-17-5	1000 ppm	1000 ppm	No data.		
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe		
Leukotriene B4	71160-24-2	No data.	No data.	No data.		
2. Ethyl alcohol	64-17-5 TWA: 1920 mg/m3 (1000 ppm) TWA		TWA: 1900 mg/m3 (1000	No data.		
		STEL: ()	ppm)			
			STEL: 9500 mg/m3 (5000			

Protective Equipment Summary - Hazard

Label Information:

ppm)

glasses Safety shower in work area Vent Hood

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing:

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

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.

Environmental Exposure Controls: No data available.

Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

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

Appearance and Odor: Solution **Melting Point:** No data. **Boiling Point:** No data.

Flash Pt: 14.00 C Method Used: Closed Cup

Evaporation Rate: No data.

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

Vapor Pressure (vs. Air or mm Hg): 43 MM_HG at 20.0 C

Vapor Density (vs. Air = 1): No data. Specific Gravity (Water = 1): No data. Solubility in Water: No data. **Autoignition Pt:** 363.00 C

Explosive Properties: No data available. **Oxidizing Properties:** No data available.

Other Information

Percent Volatile: No data.



Page: 4

Revision: 01/11/2013

10. Stability and Reactivity

Reactivity: No data available.

Stability: Unstable [] Stable [X]

Stability Note(s): Stable if stored in accordance with information listed on the product insert.

Conditions To Avoid: heat, flames and sparks

Polymerization: Will occur [X]

Incompatibility - Materials To Avoid: alkali metals

ammonia peroxides

strong oxidizing agents

Hazardous Decomposition Or Byproducts: carbon dioxide

carbon monoxide

11. Toxicological Information

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

Ethanol - Toxicity Data: Oral TDLO (man): 1.14 ml/kg; Oral TDLO (man): 650 mg/kg; Oral LD50 (rat): 7,060 mg/kg; Oral LD50 (mouse): 3,450 mg/kg; Oral LD50 (mouse): 10.5 ml/kg; Oral LD50 (rabbit): 6,300 mg/kg; Inhalation LC50 (rat): 20,000 ppm (10h); Inhalation TCLO (human): 1,800 ppm (30m); Inhalation TCLO (human): 2,500 mg/m3 (20m); Inhalation LC50

(rat): 5,900 mg/m3 (6h); Inhalation LCLO (mouse): 29,300 ppm (7h);

Ethanol - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 20 mg (24h) moderate;

Chronic Toxicological Effects: Ethanol - Investigated as a mutagen, reproductive effector, and tumorigen.

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

Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Leukotriene B4	71160-24-2	n.a.	n.a.	n.a.	n.a.
2. Ethyl alcohol	64-17-5	n.a.	1	A4	n.a.

12. Ecological Information

General 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

Globally Harmonized System of Classification and Labelling

Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Ethyl Alcohol Solution

DOT Hazard Class: 3

DOT Hazard Label: FLAMMABLE LIQUID

UN/NA Number: 1170
Packing Group: II

LAND TRANSPORT (European ADR/RID)

ADR/RID Shipping Name Ethyl Alcohol Solution



Page: 5

Revision: 01/11/2013

UN Number: 1170

Hazard Class: 3 - FLAMMABLE LIQUID

Packing Group:

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Ethyl Alcohol Solution

UN Number: 1170

Hazard Class: 3 - FLAMMABLE LIQUID

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.
S24/25 - Avoid contact with skin and eyes.

S33 - Take precautionary measures against static discharges.

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. Leukotriene B4	71160-24-2	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Leukotriene B4	71160-24-2	No	No	No	No
2. Ethyl alcohol	64-17-5	No	No	Inventory	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 01/11/2013

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.



Page: 1

Immunoassay Buffer A Concentrate (10X)

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

Revision: 01/11/2013

Supercedes Revision: 08/17/2010

1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 10011325

Product Name: Immunoassay Buffer A Concentrate (10X)

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable

according to GHS.

GHS Precaution Phrases: No data available.

GHS Response Phrases: No data available.

GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.

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.

Target Organs: No data available.

Signs and Symptoms Of Exposure: To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Medical Conditions Generally Aggravated By No data available.

Exposure:

3. Composition/Information on Ingredients

or composition, information on ingredients						
Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS#	
Sodium chloride	7647-14-5	8.0 %	231-598-3	R36	VZ4725000	
2. Potassium chloride	7447-40-7	2.0 %	231-211-8	No phrases apply.	TS8050000	
3. Sodium phosphate, Dibasic	7558-79-4	1.44 %	231-448-7	R36	WC4500000	
4. Potassium phosphate, Monobasic	7778-77-0	0.24 %	231-913-4	No phrases apply.	TC6615500	
5. Sodium azide	26628-22-8	0.1 %	247-852-1	R28-32-50/53	VY8050000	
6. Bovine Serum Albumin (BSA)	9048-46-8	1.0 %	232-936-2	No phrases apply.	MT6446000	
7. Water	7732-18-5	87.22 %	231-791-2	No phrases apply.	ZC0110000	

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

personnel. Get immediate medical attention.

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.



Immunoassay Buffer A Concentrate (10X)

Revision: 01/11/2013

Page: 2

Supercedes Revision: 08/17/2010

In Case of Eye Contact: 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 Ingestion: 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.

Indication of any immediate medical attention and special treatment needed:

No data available.

5. Fire Fighting Measures

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.

Flammable Properties and Hazards: No data available.

Flash Pt: No data.

Autoignition Pt: No data available.

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

Hazardous Combustion Products: No data available.

Fire Fighting Instructions: 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.

6. Accidental Release Measures

Protective Precautions, Protective Avoid breathing vapors and provide adequate ventilation.

Equipment and Emergency Procedures: 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).

Environmental Precautions: Take steps to avoid release into the environment, if safe to do so.

Steps To Be Taken In Case Material Is

Released Or Spilled:

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.

Store in accordance with information listed on the product insert.

Hazard Label Information: Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.

Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

0. LAP	C. Exposure Controlor Problem 1 Totolion							
Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TWA	Other Limits				
1. Sodium chloride	7647-14-5	No data.	No data.	No data.				
2. Potassium chloride	7447-40-7	No data.	No data.	No data.				
3. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.				
4. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.				
5. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	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.				
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe				
1. Sodium chloride	7647-14-5	No data.	No data.	No data.				
2. Potassium chloride	7447-40-7	No data.	No data.	No data.				
3. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.				



Immunoassay Buffer A Concentrate (10X)

Revision: 01/11/2013

Page: 3

Supercedes Revision: 08/17/2010

Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
4. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.
5. Sodium azide	26628-22-8	TWA: 0.1 mg/m3 ()	TWA: 0.1 mg/m3	TWA: 0.1
		STEL: 0.3 mg/m3 ()	STEL: 0.3 mg/m3	mg/m3
				STEL: 0.3
				mg/m3
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	C	ical registant alorses. Erro rues	h station in resoult area. I also acc	t Cofoty

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

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne

levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

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

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.

Environmental Exposure Controls: No data available.

Physical and Chamical Proportios

9. Physical and Chemical Properties						
Information on Basic Physical and Chemical Properties						
Physical States:	[] Gas [X] Liquid [] Solid					
Appearance and Odor:	No data available.					
pH:	7.2 - 7.4					
Melting Point:	No data.					
Boiling Point:	No data.					
Flash Pt:	No data.					
Evaporation Rate:	No data.					
Vapor Pressure (vs. Air or mm Hg):	No data.					
Vapor Density (vs. Air = 1):	No data.					
Specific Gravity (Water = 1):	No data.					
Solubility in Water:	No data.					
Autoignition Pt:	No data.					
Explosive Properties:	No data available.					
Oxidizing Properties:	No data available.					
Other Information						
Percent Volatile:	No data.					
	10 Stability and Reactivity					

10. Stability and Reactivity

Reactivity: No data available.

Stability: Unstable [] Stable [X]

Stability Note(s): Stable if stored in accordance with information listed on the product insert.



Immunoassay Buffer A Concentrate (10X)

Revision: 01/11/2013

Page: 4

Supercedes Revision: 08/17/2010

Conditions To Avoid: No data available.

Polymerization: Will occur [X]

Incompatibility - Materials To Avoid: strong oxidizing agents

Hazardous Decomposition Or Byproducts: hydrogen chloride gas

sodium oxides

11. Toxicological Information

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

Chronic Toxicological Effects: No data available.

Ha	azardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
1.	Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.
2.	Potassium chloride	7447-40-7	n.a.	n.a.	n.a.	n.a.
3.	Sodium phosphate, Dibasic	7558-79-4	n.a.	n.a.	n.a.	n.a.
4.	Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.
5.	Sodium azide	26628-22-8	n.a.	n.a.	A4	n.a.
6.	Bovine Serum Albumin (BSA)	9048-46-8	n.a.	n.a.	n.a.	n.a.
7.	Water	7732-18-5	n.a.	n.a.	n.a.	n.a.

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

12. Ecological Information

General 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 NameNot 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
Sodium chloride	7647-14-5	No	No	No	No
2. Potassium chloride	7447-40-7	No	No	No	No
3. Sodium phosphate, Dibasic	7558-79-4	No	Yes 5000 LB	No	No
4. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
5. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No



Immunoassay Buffer A Concentrate (10X)

Revision: 01/11/2013

Page: 5

Supercedes Revision: 08/17/2010

Hazardous Components (Chemical Name)	CAS#	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
6. Bovine Serum Albumin (BSA)	9048-46-8	No	No	No	No
7. Water	7732-18-5	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
Sodium chloride	7647-14-5	No	No	Inventory	No
2. Potassium chloride	7447-40-7	No	No	Inventory	No
3. Sodium phosphate, Dibasic	7558-79-4	No	No	Inventory	No
4. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No
5. Sodium azide	26628-22-8	No	No	Inventory	No
6. Bovine Serum Albumin (BSA)	9048-46-8	No	No	Inventory	No
7. Water	7732-18-5	No	No	Inventory	No

Regulatory Information Statement:

This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 01/11/2013

Company Policy or Disclaimer

For research use only, not for human or veterinary 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.