

Single-Chain Variable Fragments (scFv) Fusion

Revision: 10/01/2012 **Protein** Supercedes Revision: 06/10/2008

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

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

Product Code: 10011232

Product Name: Single-Chain Variable Fragments (scFv) Fusion Protein 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 Information: Cayman Chemical Company

Web site address: www.caymanchem.com

2. Hazards Identification				
GHS Classification Placard Key word GHS Hazard				
Skin Corrosion/Irritation, Category 3	none	Warning	Causes mild skin irritation	
Serious Eye Damage/Eye Irritation, Category	none	Warning	Causes eye irritation	

GHS Hazard Phrases: H316: Causes mild skin irritation.

H320: Causes eye irritation.

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

GHS Response Phrases: P332+313: If skin irritation occurs, get medical advice/attention.

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.

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 irritation.

Causes mild skin irritation.

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

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

May cause respiratory system irritation.

Target Organs: Eyes, Kidneys, Respiratory system, Skin.

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

Signs and Symptoms Of Exposure: Exposure may cause: damage to kidneys.

Prolonged exposure may cause nausea, headache, 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#
Single-Chain Variable Fragments (scFv)	NA	< 1.0 %	NA	No phrases apply.	NA
Fusion Protein					



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Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS #
2. Glycerol	56-81-5	20.0 -35.0 %	200-289-5	R36	MA8050000
3. Glycine	56-40-6	< 1.0 %	200-272-2	No phrases apply.	MB7600000
Disodium ethylenediamine tetraacetic acid	6381-92-6	< 1.0 %	NA	R36/37/38-43-52/53	AH4410000
5. Sodium chloride	7647-14-5	< 1.0 %	231-598-3	R36	VZ4725000
6. Water	7732-18-5	61.0 -80.0 %	231-791-2	No phrases apply.	ZC0110000

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: Emits toxic fumes under fire conditions.

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,

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

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:

Wash thoroughly after handling.

Multi-region format



Autoignition Pt:

SAFETY DATA SHEET

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Supercedes Revision: 06/10/2008 8. Exposure Controls/Personal Protection CAS# OSHA PEL **ACGIH TLV Hazardous Components (Chemical Name) Other Limits** Single-Chain Variable Fragments (scFv) NA No data. No data. No data. **Fusion Protein** Glycerol 56-81-5 15 (dust); 5 (resp.) mg/m3 10 mg/m3 No data. Glycine No data. No data. 3. 56-40-6 No data. 4. Disodium ethylenediamine tetraacetic acid 6381-92-6 No data. No data. No data. Sodium chloride 7647-14-5 No data. No data. No data. 7732-18-5 No data. No data. 6. Water No data. **Hazardous Components (Chemical Name)** CAS# **Britain EH40** France VL Europe Single-Chain Variable Fragments (scFv) No data. No data. No data. Fusion Protein 2. Glycerol TWA: 10 mg/m3 () 56-81-5 TWA: 10 mg/m3 No data. STEL: () 3. Glycine 56-40-6 No data. No data. No data. Disodium ethylenediamine tetraacetic acid 6381-92-6 No data. No data. No data. 5. Sodium chloride 7647-14-5 No data. No data. No data. 6. Water 7732-18-5 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:** 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 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: No data available. pH: 8.0 **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.

No data.



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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 bases

strong oxidizing agents

 $\textbf{Hazardous Decomposition Or Byproducts:} \qquad carbon \ dioxide$

carbon monoxide

11. Toxicological Information

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

Glycerol - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 500 mg (24h) mild;

Chronic Toxicological Effects: Glycerol - 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.

Glycerol RTECS Number: MA8050000

Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Single-Chain Variable Fragments (scFv)	NA	n.a.	n.a.	n.a.	n.a.
Fusion Protein					
2. Glycerol	56-81-5	n.a.	n.a.	n.a.	n.a.
3. Glycine	56-40-6	n.a.	n.a.	n.a.	n.a.
Disodium ethylenediamine tetraacetic acid	6381-92-6	n.a.	n.a.	n.a.	n.a.
5. Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.
6. 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

Globally Harmonized System of Classification and Labelling

Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation

LAND TRANSPORT (US DOT)

DOT Proper Shipping NameNot dangerous goods.

LAND TRANSPORT (European ADR/RID)



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ADR/RID Shipping Name

Not dangerous goods.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Not dangerous goods.

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

15. Regulatory Information

European Community Hazard Symbol codes Xi: Irritant

European Community Risk and Safety Phrases

R36 - Irritating to eyes.

S24/25 - Avoid contact with skin and eyes.

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
Single-Chain Variable Fragments (scFv)	NA	No	No	No	No
Fusion Protein					
2. Glycerol	56-81-5	No	No	No	No
3. Glycine	56-40-6	No	No	No	No
4. Disodium ethylenediamine tetraacetic acid	6381-92-6	No	No	No	No
5. Sodium chloride	7647-14-5	No	No	No	No
6. 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
Single-Chain Variable Fragments (scFv)	NA	No	No	No	No
Fusion Protein					
2. Glycerol	56-81-5	No	No	Inventory	No
3. Glycine	56-40-6	No	No	Inventory	No
4. Disodium ethylenediamine tetraacetic acid	6381-92-6	No	No	No	No
5. Sodium chloride	7647-14-5	No	No	Inventory	No
6. 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

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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.

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

Multi-region format



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

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

Product Code: 10011233

Product Name: Fluorescein-Labeled Rabbit IgG

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 Classification	Placard	Key word	GHS Hazard
Skin Corrosion/Irritation, Category 3	none	Warning	Causes mild skin irritation
Serious Eye Damage/Eye Irritation, Category 2B	none	Warning	Causes eye irritation

GHS Hazard Phrases: H316: Causes mild skin irritation.

H320: Causes eye irritation.

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

GHS Response Phrases: P332+313: If skin irritation occurs, get medical advice/attention.

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.

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 irritation.

Causes mild skin irritation.

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

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

May cause respiratory system irritation.

Target Organs:Eyes, Kidneys, Respiratory system, Skin.

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

Signs and Symptoms Of Exposure: Exposure may cause: damage to kidneys.

Prolonged exposure may cause nausea, headache, 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:

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3. Composition/information on ingredients					
Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS#
Fluorescein-Labeled Rabbit IgG	NA	0.1 %	NA	No phrases apply.	NA
2. Glycerol	56-81-5	50.0 %	200-289-5	R36	MA8050000



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Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS#
Bovine Serum Albumin (BSA)	9048-46-8	0.05 %	232-936-2	No phrases apply.	MT6446000
4. Sodium azide	26628-22-8	0.02 %	247-852-1	R28-32-50/53	VY8050000
5. Sodium chloride	7647-14-5	0.5 %	231-598-3	R36	VZ4725000
6. Potassium phosphate, Monobasic	7778-77-0	0.015 %	231-913-4	No phrases apply.	TC6615500
7. Sodium phosphate, Dibasic	7558-79-4	0.09 %	231-448-7	R36	WC4500000
8. Potassium chloride	7447-40-7	0.013 %	231-211-8	R22-36-52	TS8050000
9. Water	7732-18-5	49.212 %	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.

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. No data available.

Indication of any immediate medical

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: Emits toxic fumes under fire conditions.

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

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.



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

8. Exposure Controls/Personal Protection					
Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TWA	Other Limits	
Fluorescein-Labeled Rabbit IgG	NA	No data.	No data.	No data.	
2. Glycerol	56-81-5	PEL: 15 (dust); 5 (resp.)	TLV: 10 mg/m3	No data.	
		mg/m3			
3. Bovine Serum Albumin (BSA)	9048-46-8	No data.	No data.	No data.	
4. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.	
5. Sodium chloride	7647-14-5	No data.	No data.	No data.	
6. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.	
7. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.	
8. Potassium chloride	7447-40-7	No data.	No data.	No data.	
9. Water	7732-18-5	No data.	No data.	No data.	
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe	
Fluorescein-Labeled Rabbit IgG	NA	No data.	No data.	No data.	
2. Glycerol	56-81-5	TWA: 10 mg/m3 ()	TWA: 10 mg/m3	No data.	
		STEL: ()			
3. Bovine Serum Albumin (BSA)	9048-46-8	No data.	No data.	No data.	
4. 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	
5. Sodium chloride	7647-14-5	No data.	No data.	No data.	
6. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.	
7. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.	
8. Potassium chloride	7447-40-7	No data.	No data.	No data.	
9. Water	7732-18-5	No data.	No data.	No data.	

Protective Equipment Summary - Hazard

Label Information:

Compatible chemical-resistant gloves Eye wash station in work area 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 and a safety

Wash thoroughly after handling.

Environmental Exposure Controls: No data available.

9. Physical and Chemical Properties

Information on Ba	asic Physical a	nd Chemical Prop	perties
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Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: No data available.

7.2

Melting Point: No data.



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				•				
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.							
			.1. 1.					
	10. Stabil	ity and Rea	ctivity					
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 bases							
	strong oxidizing	agents						
Hazardous Decomposition Or Byproducts:	carbon dioxide							
	carbon monoxide	;						
	11. Toxico	logical Infor	mation					
Toxicological Information:				n thoroughly studied.				
	Glycerol - Irritati	on Data: Eyes (rabb	oit): 500 mg (24h	a) mild; Skin (rabbit): 5	00 mg (24h) mild;			
Chronic Toxicological Effects:	-	-	-	fector, and tumorigen.				
	-	-		ibstances (RTECS) data	a is presented here.			
	•	n RTECS for compl Number: MA80500						
Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA			
Fluorescein-Labeled Rabbit IgG	NA NA	n.a.	n.a.	n.a.	n.a.			
2. Glycerol	56-81-5	n.a.	n.a.	n.a.	n.a.			
3. Bovine Serum Albumin (BSA)	9048-46-8	n.a.	n.a.	n.a.	n.a.			
4. Sodium azide	26628-22-8	n.a.	n.a.	A4	n.a.			
5. Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.			
6. Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.			
7. Sodium phosphate, Dibasic	7558-79-4	n.a.	n.a.	n.a.	n.a.			
8. Potassium chloride	7447-40-7	n.a.	n.a.	n.a.	n.a.			
9. Water	7732-18-5	n.a.	n.a.	n.a.	n.a.			
Carcinogenicity:	NTP? No IA	ARC Monographs? N	No OSHA F	Regulated? No	·			



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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 3 - Warning! Causes mild skin irritation Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye 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 Xi: Irritant

European Community Risk and Safety Phrases

R36 - Irritating to eyes.

S24/25 - Avoid contact with skin and eyes.

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
Fluorescein-Labeled Rabbit IgG	NA	No	No	No	No
2. Glycerol	56-81-5	No	No	No	No
3. Bovine Serum Albumin (BSA)	9048-46-8	No	No	No	No
4. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No
5. Sodium chloride	7647-14-5	No	No	No	No
6. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
7. Sodium phosphate, Dibasic	7558-79-4	No	Yes 5000 LB	No	No
8. Potassium chloride	7447-40-7	No	No	No	No
9. 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
Fluorescein-Labeled Rabbit IgG	NA	No	No	No	No
2. Glycerol	56-81-5	No	No	Inventory	No
3. Bovine Serum Albumin (BSA)	9048-46-8	No	No	Inventory	No
4. Sodium azide	26628-22-8	No	No	Inventory	No
5. Sodium chloride	7647-14-5	No	No	Inventory	No
6. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No
7. Sodium phosphate, Dibasic	7558-79-4	No	No	Inventory	No
8. Potassium chloride	7447-40-7	No	No	Inventory	No
9. 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.



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Cayman	Fluorescein-Labeled Rabbit Ig	Revision: 10/01/2012
		Supercedes Revision: 06/10/2008
	Other Information	
Revision Date:	10/01/2012	
Company Policy or Disclaimer		
merchantability or any other war	nan or veterinary use. It is believed to be accurate and represents the best information currently ranty, express or implied, with respect to such information, and we assur determine the suitability of the information for their particular purposes.	me no liability resulting from its use. Users should
N.A.=Not available, N.P.=Not a	oplicable, N.D.=Not determined, N.E.=Not established, N.R.=Not require	ed



SAFETY DATA SHEETCell-Based Propidium Iodide Solution

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

Revision: 10/01/2012

Supercedes Revision: 08/25/2010

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

Product Code: 10011234

Product Name: Cell-Based Propidium Iodide Solution

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

Hazardous Components (Chemical Name)	CAS#	Concentration	EC#	Risk Phrases	RTECS #	
Propidium iodide	25535-16-4	< 1.0 %	247-081-0	R36/37/38	SF7949600	
2. Sodium chloride	7647-14-5	1.0 -5.0 %	231-598-3	R36	VZ4725000	
3. Potassium chloride	7447-40-7	< 1.0 %	231-211-8	R22-36-52	TS8050000	
4. Sodium phosphate, Dibasic	7558-79-4	< 1.0 %	231-448-7	R36	WC4500000	
5. Potassium phosphate, Monobasic	7778-77-0	< 1.0 %	231-913-4	No phrases apply.	TC6615500	
6. Water	7732-18-5	91.0 -99.0 %	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.



Cell-Based Propidium Iodide Solution

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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 ou

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

<u> </u>	_			
Hazardous Components (Chemical Name)	CAS#	OSHA PEL	ACGIH TLV	Other Limits
Propidium iodide	25535-16-4	No data.	No data.	No data.
2. Sodium chloride	7647-14-5	No data.	No data.	No data.
Potassium chloride	7447-40-7	No data.	No data.	No data.
4. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.
5. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.
6. Water	7732-18-5	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS#	Britain EH40	France VL	Europe
Propidium iodide	25535-16-4	No data.	No data.	No data.
2. Sodium chloride	7647-14-5	No data.	No data.	No data.
3. Potassium chloride	7447-40-7	No data.	No data.	No data.
4. Sodium phosphate, Dibasic	7558-79-4	No data.	No data.	No data.



Cell-Based Propidium Iodide Solution

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Hazardous Components (Chemical Name) CAS# **Britain EH40** France VL Europe Potassium phosphate, Monobasic 7778-77-0 No data. No data. No data. Water 7732-18-5 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	[X] Liquid	[] Solid	
Appearance and Odor:	No data available.			
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

) data	available
) (data

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 [] Polymerization: Will not occur [X]

Incompatibility - Materials To Avoid: No data available. **Hazardous Decomposition Or Byproducts:** No data available.



SAFETY DATA SHEETCell-Based Propidium Iodide Solution

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11.	Toxico	logical	Inforr	mation
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Toxicological Information: The toxicological effects of this product have not been thoroughly studied.

Chronic Toxicological Effects: No data available.

Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Propidium iodide	25535-16-4	n.a.	n.a.	n.a.	n.a.
2. Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.
3. Potassium chloride	7447-40-7	n.a.	n.a.	n.a.	n.a.
4. Sodium phosphate, Dibasic	7558-79-4	n.a.	n.a.	n.a.	n.a.
5. Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.
6. 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 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
Propidium iodide	25535-16-4	No	No	No	No
2. Sodium chloride	7647-14-5	No	No	No	No
3. Potassium chloride	7447-40-7	No	No	No	No
4. Sodium phosphate, Dibasic	7558-79-4	No	Yes 5000 LB	No	No
5. Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
6. 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
Propidium iodide	25535-16-4	No	No	No	No
2. Sodium chloride	7647-14-5	No	No	Inventory	No
3. Potassium chloride	7447-40-7	No	No	Inventory	No
4. Sodium phosphate, Dibasic	7558-79-4	No	No	Inventory	No



SAFETY DATA SHEETCell-Based Propidium Iodide Solution

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Hazardous Components (Chemical Name)	CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
5. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No
6. 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: 10/01/2012

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.

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



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(!)

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

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

Product Code: 10009322

Product Name: Cell-Based Assay Buffer Tablet

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 Classification Placard Key word GHS Hazard						
Serious Eye Damage/Eye Irritation, Category	Exclamation	Warning	Causes serious eye irritation			
2A	point					
Skin Corrosion/Irritation, Category 3	none	Warning	Causes mild skin irritation			
Acute Toxicity: Oral, Category 4	Exclamation	Warning	Harmful if swallowed			
	point					
Acute Toxicity: Skin, Category 5	none	Warning	May be harmful in contact with skin			
Aquatic Toxicity (Acute), Category 3	none		Harmful to aquatic life			

GHS Hazard Phrases: H319: Causes serious eye irritation

H316: Causes mild skin irritation. H302: Harmful if swallowed.

H313: May be harmful in contact with skin.

H320: Causes eye irritation. H402: Harmful to aquatic life.

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.

P273: Avoid release to the environment - if this is not the intended use.

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. P332+313: If skin irritation occurs, get medical advice/attention.

P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P330: Rinse mouth.

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

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 irritation.

Causes mild skin irritation. Harmful if swallowed.

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

May be harmful by inhalation or skin absorption.

May cause respiratory system irritation.



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Target Organs: Heart.

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

Signs and Symptoms Of Exposure: Exposure may cause: Hyperkalaemia, nausea, vomiting, abdominal pain, diarrhea or constipation,

paraesthesia, thirst, dizziness, skin rash, pruritus, weakness, muscle cramps, and minor psychiatric

or visual changes.

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 #							
Sodium phosphate, Dibasic	7558-79-4	> 1.0 %	231-448-7	R36	WC4500000		
2. Sodium chloride	7647-14-5	> 1.0 %	231-598-3	R36	VZ4725000		
Potassium phosphate, Monobasic	7778-77-0	> 1.0 %	231-913-4	No phrases apply.	TC6615500		
Potassium chloride	7447-40-7	> 1.0 %	231-211-8	R22-36-52	TS8050000		

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.

Accidental Release Measures

Protective Precautions, ProtectiveAvoid 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.



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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.

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 OSHA PEL Other Limits **Hazardous Components (Chemical Name)** CAS# **ACGIH TLV** Sodium phosphate, Dibasic 7558-79-4 No data. No data. No data. 7647-14-5 Sodium chloride No data. No data. No data. Potassium phosphate, Monobasic 7778-77-0 No data. No data. No data. Potassium chloride 7447-40-7 No data. No data. No data. **Hazardous Components (Chemical Name) Britain EH40** CAS# France VL **Europe** 7558-79-4 Sodium phosphate, Dibasic No data. No data. No data. 7647-14-5 No data. Sodium chloride No data. No data. Potassium phosphate, Monobasic 7778-77-0 No data. No data. No data. Potassium chloride 7447-40-7 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

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.

		110 data a	variable.		
	9.	Physica	al and Ch	emical Properties	
Information on Basic Physical and Ch	emic	al Properties			
Physical States:		[] Gas	[] Liquid	[X] Solid	
Appearance and Odor:		tablet(s)			
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.			



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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 [X]

Incompatibility - Materials To Avoid: strong acids

strong oxidizing agents

Hazardous Decomposition Or Byproducts: hydrogen chloride gas

phosphorus oxides potassium oxides sodium oxides

11. Toxicological Information

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

Potassium chloride - Toxicity Data: Oral LD50 (mouse): 1,500 mg/kg; Oral LD50 (rat): 2,600

mg/kg;

Potassium chloride - Irritation Data: Eyes (rabbit): 500 mg (24h) mild;

Potassium phosphate, Monobasic - Toxicity Data: Skin LD50 (rabbit): >4,640 mg/kg; Sodium chloride - Toxicity Data: Oral LD50 (rat): 3,000 mg/kg; Oral LD50 (mouse): 4,000

mg/kg;

Sodium chloride - Irritation Data: Eyes (rabbit): 100 mg (24h) moderate; Skin (rabbit): 500 mg

(24h) mild;

Sodium phosphate, Dibasic - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 500

mg (24h) mild;

Chronic Toxicological Effects: Potassium chloride - Investigated as a mutagen and tumorigen.

Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.

See actual entry in RTECS for complete information. Potassium chloride RTECS Number: TS8050000

Potassium phosphate, Monobasic RTECS Number: TC6615500

Sodium chloride RTECS Number: VZ4725000

Sodium phosphate, Dibasic RTECS Number: WC4500000

Hazardous Components (Chemical Name)	CAS#	NTP	IARC	ACGIH	OSHA
Sodium phosphate, Dibasic	7558-79-4	n.a.	n.a.	n.a.	n.a.
2. Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.
Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.
Potassium chloride	7447-40-7	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information: Avoid release into the environment.

Harmful to aquatic organisms.

Runoff from fire control or dilution water may cause pollution.



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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

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

Skin Corrosion/Irritation, Category 3 - Warning! Causes mild skin irritation

Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed

Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin

Aquatic Toxicity (Acute), Category 3 - Harmful to aquatic life

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Not dangerous goods.

LAND TRANSPORT (European ADR/RID)

ADR/RID Shipping Name

Not dangerous goods.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Not dangerous goods.

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

15. Regulatory Information

European Community Hazard Symbol codes Xn: Harmful

European Community Risk and Safety Phrases

R22 - Harmful if swallowed.

R36 - Irritating to eyes.

R52 - Harmful to aquatic organisms.

S22 - Do not breathe dust.

S24/25 - Avoid contact with skin and eyes.

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
Sodium phosphate, Dibasic	7558-79-4	No	Yes 5000 LB	No	No
2. Sodium chloride	7647-14-5	No	No	No	No
Potassium phosphate, Monobasic	7778-77-0	No	No	No	No
4. Potassium chloride	7447-40-7	No	No	No	No

Other US EPA or State Lists

1						
Hazardous Components (Chemical Name)		CAS#	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. §	Sodium phosphate, Dibasic	7558-79-4	No	No	Inventory	No
2. \$	Sodium chloride	7647-14-5	No	No	Inventory	No
3. F	Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No
4. F	Potassium chloride	7447-40-7	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: 10/01/2012

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.

 $N.A. = Not \ available, \ N.P. = Not \ applicable, \ N.D. = Not \ determined, \ N.E. = Not \ established, \ N.R. = Not \ required \ N.E. = Not \ applicable, \ N.E. = Not \ applicabl$