

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

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

1. Identification of the S	Substance/	Mixture and	of the Cor	mpany/Underta	king
Product Code:	400035				
Product Name:	Polysorbate 20				
Synonyms:	Tween 20 TM ;				
Intended Use:	For research use of	only, not for human	or veterinary use.		
Manufacturer Information					
Company Name:	Cayman Chemica	al Company			
Emergency Contact:	CHEMTREC Wit	CHEMTREC Within USA and Canada: +1 (800)424-9300			
Alternate Emergency Contact:	CHEMTREC Outside USA and Canada: +1 (703)527-3887				
Information:	Cayman Chemica	al Company	+1 (734)971-33	335	
Web site address:	www.caymanchem.com				
	2. Hazaı	rds Identifica	ation		
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 Eye	s? Yes Ingestio	on? Yes Other: Injectio	on
Potential Health Effects (Acute and Chronic):	May be harmful b	irritating to the much by inhalation, ingest kin, or respiratory sy	ion, or skin absorp	d upper respiratory tract. ption.	
Target Organs:	No data available				
LD 50 / LC 50:	Please refer to Se	ction 11.			
Signs and Symptoms Of Exposure:	To the best of our	knowledge, the tox	icological properti	ies have not been thoroug	hly investigated.
Medical Conditions Generally Aggravated By Exposure:	No data available				
3. Con	nposition/Ir	nformation c	n Ingredie	nts	
Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #
 Polyoxyethylene (20) sorbitan monolaurate (Tween 20[™]) 	9005-64-5	100.0 %	500-018-3	No phrases apply.	TR7400000
	4. First	t Aid Measu	res		
Emergency and First Aid Procedures:					
In Case of Inhalation:		air. If not breathing, imediate medical att	e 1	piration or give oxygen by	trained
In Case of Skin Contact:	-	-		or at least 20 minutes. Rer ms occur. Wash clothing	
In Case of Eye Contact:		t and flush eyes wit ted by medical perso		for at least 20 minutes. Ha	ve eyes

Multi-region format

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Cayman

Cayman	Р	olysorbate 2	0	Revision: 09/13/2012
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In Case of Ingestion:			person is conscious. Never give an	
	unconscious perso medical personne		tion. Do NOT induce vomiting un	less directed to do so by
Indication of any immediate medical	No data available.			
attention and special treatment needed:		•		
	5. Fire Fi	ghting Meas	ures	
Suitable Extinguishing Media:	Use alcohol-resist	tant foam, carbon dio	xide, water, or dry chemical spray	<i>.</i>
	Use water spray to	o cool fire-exposed c	ontainers.	
Unsuitable Extinguishing Media:	A solid water stre	am may be inefficien	t.	
Flammable Properties and Hazards:	No data available.			
Flash Pt:	No data.			
Autoignition Pt:	No data available.			
Explosive Limits:	LEL: No data.	τ	JEL: No data.	
Hazardous Combustion Products:	No data available.			
Fire Fighting Instructions:	As in any fire, we	ear self-contained bre	athing apparatus pressure-demand	(NIOSH approved or
	-		prevent contact with skin and eye	
6	. Accidenta	I Release M	easures	
Protective Precautions, Protective	Avoid raising and	l 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 avoi	id release into the env	vironment, if safe to do so.	
Steps To Be Taken In Case Material Is	-	collect, as appropriat		
Released Or Spilled:	Transfer to a cher	nical waste container	for disposal in accordance with lo	scal regulations.
	7. Handl	ling and Stor	age	
Precautions To Be Taken in Handling:	-	dust/fume/gas/mist/va or repeated exposure		
Precautions To Be Taken in Storing:	Keep container tig		•	
recautions to be taken in otoring.			isted on the product insert.	
Hazard Label Information:	Avoid contact wit		-	with adequate ventilation
	Wash thoroughly	•	o not reuse uns container. Ose	with adoquate ventilation
8. Ex	posure Con	trols/Person	al Protection	
Hazardous Components (Chemical Name)	CAS #	OSHA PEL		Other Limits
1. Polyoxyethylene (20) sorbitan monolaurate	9005-64-5	No data.	No data.	No data.
(Tween 20™)				
Hazardous Components (Chemical Name) 1. Polyoxyethylene (20) sorbitan monolaurate	CAS # 9005-64-5	Britain EH40 No data.	France VL No data.	Europe No data.
(Tween 20 [™])	3000-04-0	No data.	No data.	
Protective Equipment Summary - Hazard	Compatible chem	ical-resistant gloves	Eye wash station in work area	Lab coat Safety
Label Information:	glasses Safety s	shower in work area	Vent Hood	
Engineering Controls (Ventilation etc.):	-	osures, local exhaust mmended exposure l	ventilation, or other engineering co imits.	ontrols to control airborr
Eye Protection:	Safety glasses			
Protective Gloves:	Compatible chem	ical-resistant gloves		
Other Protective Clothing:	Lab coat	÷		



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Respiratory Equipment (Specify Type):	NIOSH approved	respirator, as o	onditions warrant.		
Work/Hygienic/Maintenance Practices:	Do not take interr	nally.			
	-	or utilizing this	material should be e	equipped with an eyewa	sh facility and a
	safety shower. Wash thoroughly	after handling			
Environmental Exposure Controls:	No data available	-			
-					
		d Chemi	cal Propertie	S	
Information on Basic Physical and Chemical	-				
Physical States:		• • •	Solid		
Appearance and Odor:	A clear, yellow v	iscous 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. Stabil	ity and R	eactivity		
Reactivity:	No data available	•	,		
Stability:	Unstable []	Stable [X]			
Stability Note(s):	Stable if stored in	accordance wi	th information listed	on the product insert.	
Conditions To Avoid:	No data available				
Polymerization:	Will occur []	Will not occ	ur [X]		
Incompatibility - Materials To Avoid:	strong oxidizing a	agents			
Hazardous Decomposition Or Byproducts:	carbon dioxide	0			
	carbon monoxide				
	11. Toxicol	logical In	formation		
Toxicological Information:				en thoroughly studied.	
	-	-		7 ml/kg; Oral LD50 (ha human): 15 mg/3D mile	-
Chronic Toxicological Effects:			a tumorigen and repr	_	.,
	-	-		ibstances (RTECS) data	a is presented here.
		-	omplete information.		•
	Polysorbate 20 R	TECS Number	TR7400000		
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.

Multi-region format



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Carcinogenicity:	NTP? No IA	ARC Monographs? 1	No OSHA Regu	lated? No	
	12. Ecolo	ogical Inform	nation		
General Ecological Information:		o the environment. control or dilution v	water may cause poll	ution.	
	13. Dispos	sal Conside	rations		
Waste Disposal Method:	Dispose in accord	dance with local, sta	ite, and federal regul	ations.	
	14. Trans	sport Inform	ation		
LAND TRANSPORT (US DOT)					
DOT Proper Shipping Name	Not dangerous go	oods.			
LAND TRANSPORT (European ADR/RID)					
ADR/RID Shipping Name	Not dangerous go	oods.			
AIR TRANSPORT (ICAO/IATA)					
ICAO/IATA Shipping Name	Not dangerous go	oods.			
Additional Transport Information:	Transport in acco	ordance with local, s	state, and federal reg	ulations.	
	15. Regul	latory Inforn	nation		
European Community Hazard Symbol codes		,			
No data available.					
European Community Risk and Safety Phrases	5				
S24/25 - Avoid contact with skin and eyes.					
S37/39 - Wear suitable gloves and eye/face	protection.				
Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Polyoxyethylene (20) sorbitan monolaurate	9005-64-5		No	No	No
(Tween 20™)					
Other US EPA or State Lists		1	-		
Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
 Polyoxyethylene (20) sorbitan monolaurate (Tween 20[™]) 	9005-64-5	No	No	Inventory	No
Regulatory Information Statement:	This SDS was pre	epared in accordanc	e with 29 CFR 1910	.1200, Regulation (EC	C) No.1272/2008,
	and European Dir	rective 67/548/EEC	as amended.		
	16. Oth	ner Informat	ion		
Revision Date:	09/13/2012				
Company Policy or Disclaimer					
For research use only, not for human or veterin	ary use.				
DISCLAIMER: This information is believed to		-			
merchantability or any other warranty, express				liability resulting from it	s use. Users should
	suitability of the m	normation for their pa	niculai purposes.		
make their own investigations to determine the					
N.A.=Not available, N.P.=Not applicable, N.D	.=Not determined, N	N.E.=Not established,	N.R.=Not required		
-	.=Not determined, N	N.E.=Not established,	N.R.=Not required		
-	.=Not determined, N	N.E.=Not established,	N.R.=Not required		
-	.=Not determined, N	N.E.=Not established,	N.R.=Not required		
-	.=Not determined, N	N.E.=Not established,	N.R.=Not required		
-	.=Not determined, N	N.E.=Not established,	N.R.=Not required		



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



Product Code:	400050				
Product Name:					
	Ellman's Reagent				
Intended Use:	For research use	only, not for hum	an or veterinary use.		
Manufacturer Information					
Company Name:	Cayman Chemic	al Company			
Emergency Contact:	CHEMTREC W	ithin USA and Ca	nada: +1 (800)424-9300		
Alternate Emergency Contact:	CHEMTREC Outside USA and Canada: +1 (703)527-3887				
Information:	Cayman Chemic	al Company	+1 (734)971-3335		
Web site address:	www.caymanche	em.com			
	2. Haza	rds Identif	cation		
GHS Classification	Placard	Key word	GHS Hazard		
Skin Corrosion/Irritation, Category 2	Exclamation point	Warning	Causes skin irritation		
Serious Eye Damage/Eye Irritation, Category 2A	Exclamation point	Warning	Causes serious eye irritation		
Target Organ Systemic Toxicity (single	Exclamation	Warning	May cause respiratory irritation,or may cause drowsing		
exposure), Category 3	point		and dizziness		
Acute Toxicity: Skin, Category 3	Skull and crossbones	Danger	Toxic in contact with skin		
Acute Toxicity: Oral, Category 3	Skull and crossbones	Danger	Toxic if swallowed		
GHS Hazard Phrases:		contact with skin.			
	H301: Toxic if s	wallowed.			
	H315: Causes skin irritation.				
		rious eye irritation e respiratory irrita			
GHS Precaution Phrases:	•				
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.				
			gas/mist/vapours/spray.		
GHS Response Phrases:	P302+352: IF O	N SKIN: Wash wi	th plenty of soap and water.		
			, get medical advice/attention.		
	P362: Take off contaminated clothing and wash before re-use.				
			se cautiously with water for several minutes. Remove cont		
	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.				
	-	ake off immediat	ely all contaminated clothing.		
			r doctor/physician if you feel unwell.		
		taminated clothing			
			mediately call a POISON CENTER or doctor/physician.		



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GHS Storage and Disposal Phrases:	Please refer to Sec	lease refer to Section 7 for Storage and Section 13 for Disposal information.					
Route(s) of Entry:	Inhalation? Yes	nhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection					
Potential Health Effects (Acute and Chronic):	Causes skin and se	Causes skin and serious eye irritation.					
	Material may be irritating to the mucous membranes and upper respiratory tract.						
	May be harmful b	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 vomiting.	amounts can o	cause abdomir	hal pain, lowered b	lood pressure, nausea, and		
	To the best of our	knowledge, tł	e toxicologica	al properties have r	not been thoroughly investigated.		
Medical Conditions Generally Aggravated By Exposure:	No data available.						

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
5. Potassium phosphate, Monobasic	7778-77-0	35.0 -45.0 %	231-913-4	No phrases apply.	TC6615500
	4. First	Aid Measu	res		
Emergency and First Aid Procedures:					
In Case of Inhalation:		air. If not breathing, mediate medical att		piration or give oxygen by	y trained
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:	• •	t and flush eyes wit ted by medical perse		for at least 20 minutes. Ha	ave eyes
In Case of Ingestion:		on. Get medical atte	-	us. Never give anything b duce vomiting unless dire	-
	5. Fire Fi	ghting Mea	sures		
Suitable Extinguishing Media:		tant foam, carbon di o cool fire-exposed		ry chemical spray.	
Unsuitable Extinguishing Media:	A solid water stre	am may be inefficie	ent.		
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:		ar self-contained br	eathing apparatus	pressure-demand (NIOSI	H approved or



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6	. Accidenta	I Release Mea	•	S Revision: 07/06/2010	
Protective Precautions, Protective			vide adequate ventilation.		
Equipment and Emergency Procedures:	As conditions wa	rrant, wear a NIOSH app	proved self-contained breathing er boots, safety goggles, and he		
Environmental Precautions:	Take steps to avo	id release into the enviro	onment, if safe to do so.		
Steps To Be Taken In Case Material Is Released Or Spilled:	-	collect, as appropriate. mical waste container for	r disposal in accordance with lo	ocal regulations.	
	7. Hand	ling and Storag	De		
Precautions To Be Taken in Handling:		dust/fume/gas/mist/vapo			
-	-	or repeated exposure.			
Precautions To Be Taken in Storing:	Keep container ti	ghtly closed.			
	Store in accordan	Store in accordance with information listed on the product insert.			
Other Precautions:	Protect from light	t.			
Hazard Label Information:	Avoid contact with Wash thoroughly	-	ot reuse this container. Use	with adequate ventilation	
8. Ex	posure Con	trols/Personal	Protection		
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits	
1. 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.	
4. Potassium phosphate, dibasic	7758-11-4	4 No data. No data.		No data.	
5. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.	
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL		
1. 5,5'-Dithiobis(2-nitrobenzoic acid)	69-78-3	No data.	No data.		
2. Acetylthiocholine iodide	1866-15-5		No data.		
3. Sodium chloride	7647-14-5	1	No data.		
4. Potassium phosphate, dibasic	7758-11-4		No data. No data.		
5. Potassium phosphate, Monobasic Protective Equipment Summary - Hazard			Eye wash station in work area	Lab coat Safety	
Label Information:	•		/ent Hood	Lab coat Safety	
Engineering Controls (Ventilation etc.):	•	osures, local exhaust ven mmended exposure limi	tilation, or other engineering co ts.	ontrols to control airborn	
Eye Protection:	Safety glasses				
Protective Gloves:	Compatible chem	nical-resistant gloves			
Other Protective Clothing:	Lab coat				
Respiratory Equipment (Specify Type):	NIOSH approved	respirator, as conditions	s 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 an	d Chemical Pr	operties		
Information on Basic Physical and Chemical					
Physical States:	Gas I II	· [] Gas [] Liquid [X] Solid			
Physical States: Appearance and Odor:		-			
Physical States: Appearance and Odor: Boiling Point:	[] Gas [] I A lyophilized pov No data.	-			



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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	No data.				
Percent Volatile:	No data.				
		ity and Rea	ctivity		
Stability:	Unstable []	Stable [X]			
Stability Note(s):	Stable if stored in	accordance with in	nformation listed on th	e product insert.	
Conditions To Avoid:	No data available				
Polymerization:	Will occur []	Will not occur [2	X]		
Incompatibility - Materials To Avoid:	strong bases strong oxidizing agents				
	carbon monoxide hydrogen chloride hydrogen iodide nitrogen oxides phosphorus oxide potassium oxides sodium oxides sulfur oxides	e gas			
	11. Toxicol	logical Infor	mation		
Toxicological Information:	The toxicological	effects of this prod	luct have not been tho	roughly studied.	
	500 mg/kg; Potassium phosph	nate, monobasic - T	Data: Oral LD50 (rat): 'oxicity Data: Oral LD		
Chronic Toxicological Effects:	See actual entry in Acetylthiocholine	stry of Toxic Effects n RTECS for comp e iodide RTECS Nu			is presented here.
lazardous Components (Chemical Name)	CAS #	NTP			OSHA
. 5,5'-Dithiobis(2-nitrobenzoic acid)	69-78-3		n.a.	n.a.	n.a.
	1866-15-5	n.a.	n.a.	n.a.	n.a.
	1000-10-0				
. Acetylthiocholine iodide	7647-14-5	n.a.	n.a.	n.a.	n.a.
2. Acetylthiocholine iodide			n.a. n.a.	n.a. n.a.	n.a. n.a.



General Ecological Information:

Waste Disposal Method:

SAFETY DATA SHEET **Ellman's Reagent**

Runoff from fire control or dilution water may cause pollution.

Dispose in accordance with local, state, and federal regulations.

12. Ecological Information

Disposal Considerations

Avoid release into the environment.

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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 Not dangerous goods.

LAND TRANSPORT (European ADR/RID)

LAND TRANSPORT (US DOT) **DOT Proper Shipping Name**

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.

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

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
2. 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
			No	Inventory	I Nia
5. Potassium phosphate, Monobasic	7778-77-0	No		Inventory	No

and European Directive 67/548/EEC as amended.

Multi-region format



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16. Other Information

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



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

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

Product Code:	400060				
Product Name:	EIA Buffer 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:	Exposure may cause: abdominal pain, congestion in internal organs, dehydration, diarrhea, gastrointestinal disturbances, lowered blood pressure, nausea, and vomiting. To the best of our knowledge, the toxicological properties have not been thoroughly investigate				
Medical Conditions Generally Aggravated By Exposure:	No data available.				

3. Composition/Information on Ingredients								
Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #			
1. Potassium phosphate, dibasic	7758-11-4	13.3 %	231-834-5	No phrases apply.	TC5580000			
2. Potassium phosphate, Monobasic	7778-77-0	3.21 %	231-913-4	No phrases apply.	TC6615500			
3. Sodium azide	26628-22-8	0.1 %	247-852-1	R28-32-50/53	VY8050000			
4. Sodium chloride	7647-14-5	23.4 %	231-598-3	No phrases apply.	VZ4725000			
5. EDTA, tetrasodium salt, hydrate	194491-31-1	0.38 %	NA	R22-41	NA			
6. Bovine Serum Albumin (BSA)	9048-46-8	1.0 %	232-936-2	No phrases apply.	MT6446000			
7. Water	7732-18-5	58.61 %	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.



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In Case of Skin Contact:	Immediately was	h skin with soap and plenty of v	vater for at least 20 minutes. F	Remove			
	contaminated clot	thing. Get medical attention if s	ymptoms occur. Wash clothin	g 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 Fi	ghting Measures					
Suitable Extinguishing Media:	Use alcohol-resis	tant foam, carbon dioxide, wate o cool fire-exposed containers.	r, or dry chemical spray.				
Unsuitable Extinguishing Media:	A solid water stre	am may be inefficient.					
Flammable Properties and Hazards:	No data available.						
Flash Pt:	No data.						
Autoignition Pt:	No data available.						
-							
Explosive Limits:	LEL: No data.		lata.				
Hazardous Combustion Products:	No data available						
Fire Fighting Instructions:	-	ear self-contained breathing app full protective gear to prevent co	-	SH approved or			
6.	Accidenta	I Release Measure	es				
Protective Precautions, Protective	Avoid breathing	vapors and provide adequate ver	ntilation.				
Equipment and Emergency Procedures:		rrant, wear a NIOSH approved a ersonal protection (rubber boots		-			
Environmental Precautions:	Take steps to avo	id 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 cher	nical waste container for dispos	al in accordance with local re	gulations.			
	7. Hand	ling and Storage					
Precautions To Be Taken in Handling:	U	dust/fume/gas/mist/vapours/spra or repeated exposure.	ıy.				
Precautions To Be Taken in Storing:	Keep container ti		1				
		ce with information listed on th					
Hazard Label Information:	Avoid contact with Wash thoroughly	-	e this container. Use with a	dequate ventilatior			
8. Exp	oosure Con	trols/Personal Prot	tection				
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limits			
1. Potassium phosphate, dibasic	7758-11-4	No data.	No data.	No data.			
2. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.			
3. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.			
4. Sodium chloride	7647-14-5	No data.	No data.	No data.			
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No data.	No data.	No data.			
Bovine Serum Albumin (BSA) 7. Water	9048-46-8	No data. No data.	No data.	No data. No data.			
· · · · · · · · · · · · · · · · · · ·				Ino uala.			
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe			



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Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe
2. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.
3. Sodium azide	26628-22-8	TWA: 0.1 mg/m3 () STEL: 0.3 mg/m3 ()	TWA: 0.1 mg/m3 STEL: 0.3 mg/m3	TWA: 0.1 mg/m3 STEL: 0.3 mg/m3
I. Sodium chloride	7647-14-5	No data.	No data.	No data.
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No data.	No data.	No data.
6. Bovine Serum Albumin (BSA)	9048-46-8	No data.	No data.	No data.
7. Water	7732-18-5	No data.	No data.	No data.
Protective Equipment Summary - Hazard Label Information:	-	••••	wash station in work area La t Hood	ab coat Safety
Engineering Controls (Ventilation etc.):			tion, or other engineering contr	ols to control airb
Engineering Controls (Ventilation etc.).	-	mmended exposure limits.	tuon, of other engineering conti	
Eye Protection:	Safety glasses			
Protective Gloves:	Compatible chem	ical-resistant gloves		
Other Protective Clothing:	Lab coat			
Respiratory Equipment (Specify Type):	NIOSH approved	respirator, as conditions w	arrant.	
Work/Hygienic/Maintenance Practices:	Do not take interr Facilities storing safety shower. Wash thoroughly	or utilizing this material sh	ould be equipped with an eyewa	ash facility and a
Environmental Exposure Controls:	No data available			
9.	Physical an	d Chemical Pro	perties	
Information on Basic Physical and Chemica				
Physical States:	[] Gas [X]	Liquid [] Solid		
Appearance and Odor:	A clear, colorless	solution		
pH:	7.0			
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.			
Autoignition Pt:	No data.			
Explosive Properties:	No data available			
Oxidizing Properties:	No data available			
Other Information				
Percent Volatile:	No data.			
		ity and Reactivit	у	
Reactivity:	No data available			
	Unstable []	Stable [X]		

Multi-region format



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Stability Note(s):	Stable if stored in	accordance with in	nformation 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:	hydrogen chloride								
	potassium oxides sodium oxides	z gus							
	11. Toxicol	ogical Infor	mation						
Toxicological Information:	The toxicological	effects of this com	pound have not beer	n thoroughly studied.					
Chronic Toxicological Effects:	No data available.								
Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA				
1. Potassium phosphate, dibasic	7758-11-4	n.a.	n.a.	n.a.	n.a.				
2. Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.				
3. Sodium azide	26628-22-8	n.a.	n.a.	A4	n.a.				
4. Sodium chloride	7647-14-5	n.a.	n.a.	n.a.	n.a.				
5. EDTA, tetrasodium salt, hydrate	194491-31-1	n.a.	n.a.	n.a.	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 IA	RC Monographs?	No OSHA Regu	ilated? No					
	12. Ecolo	gical Inform	nation						
General Ecological Information:		o the environment.	water may cause pol	lution.					
	13. Dispos	al Conside	rations						
Waste Disposal Method:	Dispose in accord	lance with local, sta	ate, and federal regul	ations.					
	14. Trans	sport Inform	nation						
LAND TRANSPORT (US DOT)		•							
DOT Proper Shipping Name	Not dangerous go	ods.							
LAND TRANSPORT (European ADR/RID)	0 0								
ADR/RID Shipping Name	Not dangerous go	ods							
AIR TRANSPORT (ICAO/IATA)	Trot daligerous go								
	NT / 1	1							
ICAO/IATA Shipping Name	Not dangerous go								
Additional Transport Information:	Transport in accor	rdance with local, s	state, and federal reg	ulations.					
	15. Regul	atory Inform	nation						
European Community Hazard Symbol codes No data available. European Community Risk and Safety Phras									
S24/25- Avoid contact with skin and eyS37/39- Wear suitable gloves and eye/fi	es.								
US EPA SARA Title III		Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110				
	CAS #	. ,	No		No				
Hazardous Components (Chemical Name)	7758-11-4	No							
Hazardous Components (Chemical Name)		No No	No	No	No				



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Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110		
4. Sodium chloride	7647-14-5	No	No	No	No		
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No	No	No	No		
6. Bovine Serum Albumin (BSA)	9048-46-8	No	No	No	No		
7. Water	7732-18-5	No	No	No	No		
Other US EPA or State Lists							
Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65		
1. Potassium phosphate, dibasic	7758-11-4	No	No	Inventory	No		
2. Potassium phosphate, Monobasic	7778-77-0	No	No	Inventory	No		
3. Sodium azide	26628-22-8	No	No	Inventory	No		
4. Sodium chloride	7647-14-5	No	No	Inventory	No		
5. EDTA, tetrasodium salt, hydrate	194491-31-1	No	No	No	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:	-	epared in accordanc rective 67/548/EEC		0.1200, Regulation (EC	C) No.1272/2008,		

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.

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



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

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

Product Code:	400062	Mixture and			-	
Product Name:						
	Wash Buffer Con		, .			
Intended Use:	For research use	only, not for humar	n or veterinary use.			
Manufacturer Information						
Company Name:	Cayman Chemica					
Emergency Contact:	CHEMTREC Wi	thin USA and Cana	()			
Alternate Emergency Contact:	CHEMTREC Ou	tside USA and Can	ada: +1 (703)5	527-3887		
Information:	Cayman Chemical Company +1 (734)971-3335					
Web site address:	www.caymanche	m.com				
	2. Haza	rds Identific	ation			
GHS Hazard Phrases:	Based on evaluate according to GHS	-	uilable data this sub	stance or mixture is not cl	assifiable	
GHS Precaution Phrases:	No data available	.				
GHS Response Phrases:	No data available	2.				
GHS Storage and Disposal Phrases:	Please refer to Se	ection 7 for Storage	and Section 13 for	Disposal information.		
Route(s) of Entry:	Inhalation? Yes	Skin? Yes Ey	es? Yes Ingestio	n? Yes Other: Injectio	on	
Potential Health Effects (Acute and Chronic):	-	-		nd upper respiratory tract.		
	-	kin, or respiratory s	tion, or skin absorp system irritation.	tion.		
Target Organs:	-	kin, or respiratory s	-	tion.		
	May cause eye, sh No data available Ingestion of large vomiting.	kin, or respiratory s e. e amounts can cause	system irritation. e abdominal pain, lo	tion. owered blood pressure, na es have not been thoroug		
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	May cause eye, sh No data available Ingestion of large vomiting. To the best of our	kin, or respiratory s e. e amounts can cause r knowledge, the to	system irritation. e abdominal pain, lo	owered blood pressure, na		
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	May cause eye, sh No data available Ingestion of large vomiting. To the best of our No data available	kin, or respiratory s e. e amounts can cause r knowledge, the to e.	system irritation. e abdominal pain, lo	owered blood pressure, na es have not been thoroug		
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr	May cause eye, sh No data available Ingestion of large vomiting. To the best of our No data available	kin, or respiratory s e. e amounts can cause r knowledge, the to e.	system irritation. e abdominal pain, lo xicological properti	owered blood pressure, na es have not been thoroug		
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) . Potassium phosphate, dibasic	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available nposition/Ir CAS # 7758-11-4	kin, or respiratory s e. e amounts can cause r knowledge, the to e. nformation 53.0 %	system irritation. e abdominal pain, lo xicological properti on Ingredie	owered blood pressure, na es have not been thoroug nts Risk Phrases No phrases apply.	hly investigat RTECS # TC5580000	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) . Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available nposition/Ir CAS # 7758-11-4 7778-77-0	kin, or respiratory s e. e amounts can cause r knowledge, the to e. Concentration 53.0 % 12.9 %	system irritation. e abdominal pain, lo xicological properti On Ingredie EC# 231-834-5 231-913-4	owered blood pressure, na es have not been thoroug MtS Risk Phrases No phrases apply. No phrases apply.	hly investigat RTECS # TC5580000 TC6615500	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) 1. Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available nposition/lr CAS # 7758-11-4 7778-77-0 7732-18-5	kin, or respiratory s e. e amounts can cause r knowledge, the to c. Concentration 53.0 % 12.9 % 34.1 %	system irritation. e abdominal pain, lo xicological properti On Ingredie 231-834-5 231-913-4 231-791-2	owered blood pressure, na es have not been thoroug nts Risk Phrases No phrases apply.	hly investigat	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) 1. Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available nposition/lr CAS # 7758-11-4 7778-77-0 7732-18-5	kin, or respiratory s e. e amounts can cause r knowledge, the to e. Concentration 53.0 % 12.9 %	system irritation. e abdominal pain, lo xicological properti On Ingredie 231-834-5 231-913-4 231-791-2	owered blood pressure, na es have not been thoroug MtS Risk Phrases No phrases apply. No phrases apply.	hly investigat RTECS # TC5580000 TC6615500	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. Cor Hazardous Components (Chemical Name) 1. Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic 3. Water	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available nposition/lr CAS # 7758-11-4 7778-77-0 7732-18-5	kin, or respiratory s e. e amounts can cause r knowledge, the to c. Concentration 53.0 % 12.9 % 34.1 %	system irritation. e abdominal pain, lo xicological properti On Ingredie 231-834-5 231-913-4 231-791-2	owered blood pressure, na es have not been thoroug MtS Risk Phrases No phrases apply. No phrases apply.	hly investigat RTECS # TC5580000 TC6615500	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) 1. Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available mposition/Ir CAS # 7758-11-4 7778-77-0 7732-18-5 4. First	kin, or respiratory s a mounts can cause r knowledge, the to b formation 53.0 % 12.9 % 34.1 % t Aid Measu	system irritation. e abdominal pain, lo xicological properti On Ingredie 231-834-5 231-913-4 231-913-4 231-791-2 Jres	owered blood pressure, na es have not been thoroug MtS Risk Phrases No phrases apply. No phrases apply.	RTECS # TC5580000 TC6615500 ZC0110000	
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) 1. Potassium phosphate, dibasic 2. Potassium phosphate, Monobasic 3. Water Emergency and First Aid Procedures:	May cause eye, si No data available Ingestion of large vomiting. To the best of our No data available mposition/Ir CAS # 7758-11-4 7778-77-0 7732-18-5 4. First Remove to fresh a personnel. Get im Immediately was	kin, or respiratory s e amounts can cause r knowledge, the to s. Concentration 53.0 % 12.9 % 34.1 % t Aid Measu air. If not breathing mediate medical a h skin with soap an	system irritation. e abdominal pain, lo xicological properti On Ingredie 231-834-5 231-913-4 231-913-4 231-791-2 Jres g, give artificial resp ttention. d plenty of water for	owered blood pressure, na es have not been thoroug MtS Risk Phrases No phrases apply. No phrases apply. No phrases apply.	RTECS # TC5580000 TC6615500 ZC0110000 v trained nove	



Cayman	Wash Buf	fer Concentrate (40	· ·	Revision: 09/13/2012		
			•	Revision: 05/01/2012		
In Case of Ingestion:		with water provided person is construction. Do N n. Get medical attention. Do N l.				
Indication of any immediate medical attention and special treatment needed:	No data available					
	5. Fire Fi	ghting Measures				
Suitable Extinguishing Media:	Use alcohol-resis	tant foam, carbon dioxide, wate	r, or dry chemical spray.			
	Use water spray t	o cool fire-exposed containers.				
Unsuitable Extinguishing Media:	A solid water stre	am 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		atu.			
Fire Fighting Instructions:	-	ear self-contained breathing app full protective gear to prevent co	-	IIOSH approved or		
6	. Accidenta	I Release Measure	es			
Protective Precautions, Protective Avoid breathing vapors and provide adequate ventilation.						
Equipment and Emergency Procedures:		rrant, wear a NIOSH approved				
	and appropriate p	ersonal protection (rubber boots	s, safety goggles, and heav	y rubber gloves).		
Environmental Precautions:	Take steps to avo	id 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 cher	nical waste container for dispos	al in accordance with loca	l regulations.		
	7. Hand	ling and Storage				
Precautions To Be Taken in Handling:	-	dust/fume/gas/mist/vapours/spra or repeated exposure.	ıy.			
Precautions To Be Taken in Storing:	Keep container tig Store in accordan	ghtly closed. ce with information listed on th	e product insert.			
Hazard Label Information:	Avoid contact wit Wash thoroughly	•	e this container. Use wit	h adequate ventilation		
8. Ex	posure Con	trols/Personal Pro	tection			
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits		
1. Potassium phosphate, dibasic	7758-11-4	No data.	No data.	No data.		
2. Potassium phosphate, Monobasic	7778-77-0	No data.	No data.	No data.		
3. Water	7732-18-5	No data.	No data.	No data.		
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe		
1. Potassium phosphate, dibasic	7758-11-4	No data.	No data.	No data.		
2. Potassium phosphate, Monobasic	7778-77-0		No data.	No data.		
3. Water Protective Equipment Summary - Hazard	7732-18-5 Compatible chem		No data. h station in work area L	No data. ab coat Safety		
Label Information:	-	shower in work area Vent Ho		ab coar Bartly		
Engineering Controls (Ventilation etc.):	Use process enclo	osures, local exhaust ventilation		rols to control airborn		
		mmended exposure limits.				
Eye Protection:	Safety glasses					



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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.

9. Physical and Chemical Properties

Information on Basic Physical and Chemical	Properties						
Physical States:	[] Gas [X]	Liquid [] Solid					
Appearance and Odor:	A clear, colorless	s 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	2.					
Oxidizing Properties:	No data available	2.					
Other Information							
Percent Volatile:	No data.						
	10. Stabil	lity and Read	ctivity				
Reactivity:	No data available	<u>.</u>					
Stability:	Unstable []	Stable [X]					
Stability Note(s):	Stable if stored in	n accordance with info	ormation listed on the	e product insert.			
Conditions To Avoid:	No data available	2.					
Polymerization:	Will occur []	Will not occur [X]				
Incompatibility - Materials To Avoid:	strong oxidizing	agents					
Hazardous Decomposition Or Byproducts:	phosphorus oxide						
	potassium oxides	8					
	11. Toxico	logical Inforn	nation				
Toxicological Information:	The toxicological	l effects of this produ	ct have not been thore	oughly studied.			
Chronic Toxicological Effects:	No data available	2.					
Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA		

Hazardous Components (Chemical Nam	ie) CAS #	NTP	IARC	ACGIH	OSHA
1. Potassium phosphate, dibasic	7758-11-4	n.a.	n.a.	n.a.	n.a.
2. Potassium phosphate, Monobasic	7778-77-0	n.a.	n.a.	n.a.	n.a.



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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? N	No OSHA Regu	lated? No	
	12. Ecolo	gical Inform	ation		
General Ecological Information:	Avoid release inte	o the environment.			
	Runoff from fire	control or dilution v	vater may cause poll	ution.	
	13. Dispos	al Conside	ations		
Waste Disposal Method:	Dispose in accord	lance with local, sta	te, and federal regul	ations.	
	14. Trans	sport Inform	ation		
LAND TRANSPORT (US DOT)					
DOT Proper Shipping Name	Not dangerous go	oods.			
LAND TRANSPORT (European ADR/RID)					
ADR/RID Shipping Name	Not dangerous go	oods.			
AIR TRANSPORT (ICAO/IATA)					
ICAO/IATA Shipping Name	Not dangerous go	oods.			
Additional Transport Information:	Transport in acco	rdance with local, s	tate, and federal regu	ilations.	
	15. Regul	atory Inform	nation		
European Community Hazard Symbol codes	5	,			
No data available.					
European Community Risk and Safety Phrase	s				
S24/25 - Avoid contact with skin and eye					
S37/39 - Wear suitable gloves and eye/fac	e protection.				
US EPA SARA Title III					
Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
I. 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	Inventory	No
Regulatory Information Statement:	-	epared in accordance rective 67/548/EEC		.1200, Regulation (EC	²) No.1272/2008,
	16. Oth	ner Informat	ion		
Revision Date:	09/13/2012				

Company Policy or Disclaimer

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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



SAFETY DATA SHEET Human Plasma

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

Revision: 11/20/2012 Supercedes Revision: 11/22/2011

Product Code:	400100				
Product Name:	Human Plasma				
Intended Use:	For research use or	nly, not for human	or veterinary u	se.	
Manufacturer Information					
Company Name:	Cayman Chemical	Company			
Emergency Contact:	CHEMTREC With	nin USA and Cana	da: +1 (80	0)424-9300	
Alternate Emergency Contact:	CHEMTREC Outs	side USA and Can	ada: +1 (70	03)527-3887	
Information:	Cayman Chemical	Company	+1 (734)971	-3335	
Web site address:	www.caymanchem	1.com			
	2. Hazaro	ds Identific	ation		
GHS Hazard Phrases:	Based on evaluatio according to GHS.	•	ilable data this s	substance or mixture is not classifiable	;
GHS Precaution Phrases:	No data available.				
GHS Response Phrases:	No data available.				
GHS Storage and Disposal Phrases:	Please refer to Sect	tion 7 for Storage	and Section 13	for Disposal information.	
Route(s) of Entry:	Inhalation? Yes	Skin? Yes Eye	es? Yes Inge	stion? Yes Other: Injection	
Potential Health Effects (Acute and Chronic):		ie of fransminning i	intectious agent	S.	
	-	ritating to the muc	ion, or skin abs	and upper respiratory tract. orption.	
	Material may be in May be harmful by	ritating to the muc	ous membranes ion, or skin abs	and upper respiratory tract. orption.	
Target Organs:	Material may be irr May be harmful by May cause eye, ski No data available.	ritating to the muc inhalation, ingest in, or respiratory s	ous membranes ion, or skin abs ystem irritation.	and upper respiratory tract. orption.	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	Material may be in May be harmful by May cause eye, ski No data available. To the best of our h	ritating to the muc inhalation, ingest in, or respiratory s	ous membranes ion, or skin abs ystem irritation.	and upper respiratory tract. orption.	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	Material may be in May be harmful by May cause eye, ski No data available. To the best of our h	ritating to the muc / inhalation, ingest in, or respiratory s knowledge, the to	ous membranes ion, or skin abs ystem irritation kicological prop	and upper respiratory tract. orption. erties have not been thoroughly inves	igate
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name)	Material may be in May be harmful by May cause eye, ski No data available. To the best of our h No data available. nposition/In CAS #	ritating to the muc inhalation, ingest in, or respiratory s knowledge, the to formation (Concentration	ous membranes ion, or skin abs ystem irritation kicological prop	and upper respiratory tract. orption. erties have not been thoroughly inves	igate
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr lazardous Components (Chemical Name)	Material may be in May be harmful by May cause eye, ski No data available. To the best of our h No data available. nposition/In CAS #	ritating to the muc 7 inhalation, ingest in, or respiratory s knowledge, the to formation c	ous membranes ion, or skin abs ystem irritation kicological prop	and upper respiratory tract. orption. erties have not been thoroughly inves	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name)	Material may be im May be harmful by May cause eye, ski No data available. To the best of our H No data available. nposition/Int CAS # NA	ritating to the muc inhalation, ingest in, or respiratory s knowledge, the to formation (Concentration	ous membranes ion, or skin abs ystem irritation. kicological prop on Ingred EC# NA	and upper respiratory tract. orption. erties have not been thoroughly inves ients Risk Phrases	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name)	Material may be im May be harmful by May cause eye, ski No data available. To the best of our H No data available. nposition/Int CAS # NA	ritating to the muc / inhalation, ingest in, or respiratory s knowledge, the to formation (Concentration 100.0 %	ous membranes ion, or skin abs ystem irritation. kicological prop on Ingred EC# NA	and upper respiratory tract. orption. erties have not been thoroughly inves ients Risk Phrases	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) . Human Plasma Emergency and First Aid Procedures:	Material may be im May be harmful by May cause eye, ski No data available. To the best of our H No data available. nposition/Int cas # 4. First	ritating to the muc inhalation, ingest in, or respiratory s knowledge, the to formation (<u>Concentration</u> 100.0 % Aid Measu ir. If not breathing	ous membranes ion, or skin abs ystem irritation kicological prop on Ingred EC# NA IRES	and upper respiratory tract. orption. erties have not been thoroughly inves ients Risk Phrases	igat
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: <u>3. COr</u> lazardous Components (Chemical Name) Human Plasma Emergency and First Aid Procedures: In Case of Inhalation:	Material may be irr May be harmful by May cause eye, ski No data available. To the best of our H No data available. nposition/Int CAS # 4. First Remove to fresh ai personnel. Get imm Immediately wash	ritating to the much inhalation, ingest in, or respiratory s knowledge, the tox formation (<u>Concentration</u> 100.0 % Aid Measu ir. If not breathing nediate medical at skin with soap and	ous membranes ion, or skin abs ystem irritation. kicological prop on Ingred EC# NA IFES , give artificial r tention. d plenty of wate	and upper respiratory tract. orption. erties have not been thoroughly inves ients Risk Phrases No phrases apply.	
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COr Hazardous Components (Chemical Name) . Human Plasma	Material may be in May be harmful by May cause eye, ski No data available. To the best of our H No data available. nposition/Int CAS # A. First Remove to fresh ai personnel. Get imm Immediately wash contaminated cloth	ritating to the muc inhalation, ingest in, or respiratory s knowledge, the tor formation (<u>Concentration</u> 100.0 % <u>Aid Measu</u> ir. If not breathing nediate medical at skin with soap and ing. Get medical a and flush eyes with	ous membranes ion, or skin abs ystem irritation. kicological prop on Ingred EC# NA ITES , give artificial n tention. d plenty of wate attention if symp	and upper respiratory tract. orption. erties have not been thoroughly inves ients Risk Phrases No phrases apply. espiration or give oxygen by trained r for at least 20 minutes. Remove	

Multi-region format



SAFETY DATA SHEET Human Plasma

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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: 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 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. After removal, flush contaminated area and all cleaning materials with a 10% bleach aqueous solution. 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.		

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Human Plasma	NA	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe
1. Human Plasma	NA	No data.	No data.	No data.
Protective Equipment Summary - Hazard Label Information:	Eye wash station shower in work a		x disposable gloves Safety gla	asses Safety
Engineering Controls (Ventilation etc.):	1	osures, local exhaust ventilation, mmended exposure limits.	or other engineering controls to	control airborn
Eye Protection:	Safety glasses			
Protective Gloves:	Compatible chem	ical-resistant gloves		
Other Protective Clothing:	Lab coat			
Respiratory Equipment (Specify Type):	NIOSH approved	respirator, as conditions warran	t.	
Work/Hygienic/Maintenance Practices:	Do not take interr Facilities storing safety shower. Wash thoroughly	or utilizing this material should l	be equipped with an eyewash fa	cility and a



Environmental Exposure Controls:

SAFETY DATA SHEET Human Plasma

Physical and Chemical Properties

No data available.

9.

Information on Basic Physical and Chemical Properties **Physical States:** [] Gas [] Liquid [X] Solid Appearance and Odor: A lyophilized powder **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 not occur [X] Will occur [] Incompatibility - Materials To Avoid: strong oxidizing agents Hazardous Decomposition Or Byproducts: No data available. 11. Toxicological Information The toxicological effects of this compound have not been thoroughly studied. **Toxicological Information: Chronic Toxicological Effects:** No data available. Hazardous Components (Chemical Name) CAS # NTP IARC ACGIH OSHA Human Plasma NA n.a. n.a. n.a. 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 LAND TRANSPORT (US DOT) **DOT Proper Shipping Name** Not dangerous goods. LAND TRANSPORT (European ADR/RID) **Multi-region format**

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SAFETY DATA SHEET Human Plasma

Revision: 11/20/2012 Supercedes Revision: 11/22/2011

ADR/RID Shipping Name

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

Not dangerous goods.

European Community Hazard Symbol codes Biological Hazard: B

European Community Risk and Safety Phrases

S24/25 - Avoid contact with skin and eyes.

S28 - After contact with skin, wash immediately with plenty of soap-suds.

 $S36/37/39 \quad \ \ \, \text{-Wear suitable protective clothing, gloves and eye/face protection.}$

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Human Plasma	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. Human Plasma	NA	No	No	No	No
Regulatory Information Statement:	-	epared in accordance rective 67/548/EEC		1200, Regulation (EC	C) No.1272/2008,
	16. Oth	ner Informati	ion		
Revision Date:	11/20/2012				

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



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

Revision: 11/20/2012 Supercedes Revision: 11/22/2011

Product Code:	400110
Product Name:	Non-specific Mouse Serum
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:	No data available.
Route(s) of Entry:	Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection
Potential Health Effects (Acute and Chronic):	Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation.
	May be harmful by inhalation, ingestion, or skin absorption.
Target Organs:	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation.
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By	May be harmful by inhalation, ingestion, or skin absorption.May cause eye, skin, or respiratory system irritation.No data available.To the best of our knowledge, the toxicological properties have not been thoroughly investig
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	May be harmful by inhalation, ingestion, or skin absorption.May cause eye, skin, or respiratory system irritation.No data available.To the best of our knowledge, the toxicological properties have not been thoroughly investig
Potential Health Effects (Acute and Chronic): Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON Hazardous Components (Chemical Name)	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON lazardous Components (Chemical Name)	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases NA 100.0 %
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON lazardous Components (Chemical Name)	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON Hazardous Components (Chemical Name)	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases NA 100.0 %
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON lazardous Components (Chemical Name) Non-specific Mouse Serum Emergency and First Aid Procedures:	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases NA 100.0 %
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CON lazardous Components (Chemical Name) Non-specific Mouse Serum Emergency and First Aid Procedures: n Case of Inhalation:	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases NA 100.0 % NA No phrases apply. 4. First Aid Measures Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained
Target Organs: Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. COn lazardous Components (Chemical Name) Non-specific Mouse Serum	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. No data available. To the best of our knowledge, the toxicological properties have not been thoroughly investig No data available. mposition/Information on Ingredients CAS # Concentration EC# Risk Phrases NA 100.0 % A. No phrases apply. 4. First Aid Measures Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention. Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove



SAFETY DATA SHEET Non-specific Mouse Serum

Indication of any immediate medical attention and special treatment needed:	No data available			
	5. Fire Fi	ighting Measu	res	
Suitable Extinguishing Media:		tant foam, carbon dioxid to cool fire-exposed con	de, water, or dry chemical spray tainers.	·.
Unsuitable Extinguishing Media:	A solid water stre	eam may be inefficient.		
Flammable Properties and Hazards:	No data available			
Flash Pt:	No data.			
Autoignition Pt:	No data available			
Explosive Limits:	LEL: No data.	UE	L: No data.	
Hazardous Combustion Products:	No data available			
Fire Fighting Instructions:	-		ing apparatus pressure-demand event contact with skin and eye	
6	. Accidenta	I Release Mea	asures	
Protective Precautions, Protective Equipment and Emergency Procedures:	As conditions wa	rrant, wear a NIOSH ap	ovide adequate ventilation. proved self-contained breathing per boots, safety goggles, and he	
Environmental Precautions:	Take steps to avo	id release into the envir	onment, if safe to do so.	
Steps To Be Taken In Case Material Is Released Or Spilled:	-	collect, as appropriate. mical waste container fo	or disposal in accordance with lo	ocal regulations.
	7. Hand	ling and Stora	ge	
Precautions To Be Taken in Handling:	-	dust/fume/gas/mist/vapo or repeated exposure.	burs/spray.	
Precautions To Be Taken in Storing:	Keep container ti Store in accordan		ed on the product insert.	
Hazard Label Information:	Avoid contact wi Wash thoroughly	-	not reuse this container. Use	with adequate ventilation
8. Ex	posure Con	trols/Personal	Protection	
Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Non-specific Mouse Serum	NA	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe
1. Non-specific Mouse Serum Protective Equipment Summary - Hazard Label Information:	-	-	No data. Eye wash station in work area Vent Hood	No data. Lab coat Safety
Engineering Controls (Ventilation etc.):	-	osures, local exhaust ver mmended exposure lim	ntilation, or other engineering co	ontrols to control airborne
Eye Protection:	Safety glasses			

Respiratory Equipment (Specify Type):

Protective Gloves:

Other Protective Clothing:

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.

Compatible chemical-resistant gloves

NIOSH approved respirator, as conditions warrant.

Lab coat



SAFETY DATA SHEET Non-specific Mouse Serum

Page: 3

Environmental Exposure Controls:	No data available.	22/2011
9.	Physical and Chemical Properties	
Information on Basic Physical and Chemical	Properties	
Physical States:	[]Gas []Liquid [X]Solid	
Appearance and Odor:	A lyophilized powder	
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:	carbon dioxide carbon monoxide	
	11. Toxicological Information	
Toxicological Information:	The toxicological effects of this product have not been thoroughly studied.	
Chronic Toxicological Effects:	No data available.	
lazardous Components (Chemical Name)	CAS # NTP IARC ACGIH OSHA	A
. Non-specific Mouse Serum	NA n.a. n.a. n.a. 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	
LAND TRANSPORT (US DOT)		_
DOT Proper Shipping Name	Not dangerous goods.	

Multi-region format



SAFETY DATA SHEET Non-specific Mouse Serum

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				Supercedes Rev	rision: 11/22/2011
LAND TRANSPORT (European ADR/RID)					
ADR/RID Shipping Name	Not dangerous go	oods.			
AIR TRANSPORT (ICAO/IATA)					
ICAO/IATA Shipping Name	Not dangerous go	oods.			
Additional Transport Information:			state, and federal reg	ulations.	
	-		-		
	-	latory Inform	nation		
European Community Hazard Symbol codes	j				
No data available.					
European Community Risk and Safety Phras					
S24/25 - Avoid contact with skin and ey S37/39 - Wear suitable gloves and eye/f					
US EPA SARA Title III					
Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Non-specific Mouse Serum	NA		No	No	No
Other US EPA or State Lists	I		I		I
Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.6
1. Non-specific Mouse Serum	NA		No	No	No
	16. Oth	ner Informat	tion		
Revision Date:	11/20/2012				
Company Policy or Disclaimer					
For research use only, not for human or veto DISCLAIMER: This information is believe merchantability or any other warranty, expr make their own investigations to determine	d to be accurate and re ess or implied, with res	spect to such informat	ion, and we assume no		-
N.A.=Not available, N.P.=Not applicable, N	J.D.=Not determined, I	N.E.=Not established,	N.R.=Not required		



SAFETY DATA SHEET Interleukin-1.beta. (human) AChE-FAb' Conjugate

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

Revision: 01/29/2013 Supercedes Revision: 04/12/2006

Product Code:	483310				
Product Name:	Interleukin-1.beta	. (human) AChE-F	Ab' Conjugate		
Intended Use:	For research use of	only, not for huma	n or veterinary use		
Manufacturer Information					
Company Name:	Cayman Chemica	l Company			
Emergency Contact:	CHEMTREC Wit	thin USA and Cana	ada: +1 (800)	424-9300	
Alternate Emergency Contact:	CHEMTREC Out	tside USA and Car	ada: +1 (703))527-3887	
Information:	Cayman Chemica	l Company	+1 (734)971-3	335	
Web site address:	www.caymancher	m.com			
	2. Hazar	ds Identific	ation		
GHS Hazard Phrases:	Based on evaluati according to GHS	-	ailable data this su	ostance or mixture is not c	lassifiable
GHS Precaution Phrases:	No data available.				
GHS Response Phrases:	No data available.				
GHS Storage and Disposal Phrases:	Please refer to Sec	ction 7 for Storage	and Section 13 for	r Disposal information.	
Route(s) of Entry:	Inhalation? Yes	Skin? Yes Ey	es? Yes Ingesti	on? Yes Other: Injection	on
Potential Health Effects (Acute and Chronic):	May be harmful b	rritating to the muo y inhalation, inges kin, or respiratory s	tion, or skin absor	nd upper respiratory tract. ption.	
Target Organs:	No data available.				
Signs and Symptoms Of Exposure:	To the best of our	knowledge, the to	xicological proper	ties have not been thoroug	hly investiga
Medical Conditions Generally Aggravated By Exposure:	No data available.				
3. Cor	nposition/Ir	formation	on Ingredie	ents	
lazardous Components (Chemical Name)	CAS #	Concentration	EC#	Risk Phrases	RTECS #
Interleukin-1.beta. (human) AChE-FAb' Conjugate	NA	99.99 %	NA	No phrases apply.	NA
. Sodium azide	26628-22-8	0.01 %	247-852-1	R28-32-50/53	VY805000
	4. First	Aid Measu	ures		
Emergency and First Aid Procedures:					
In Case of Inhalation:	Remove to fresh a				

 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.



SAFETY DATA SHEET Interleukin-1.beta. (human) AChE-FAb'

Revision: 01/29/2013 Supercedes Revision: 04/12/2006

Conjugate Indication of any immediate medical No data available. attention and special treatment needed: 5. Fire Fighting Measures Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Suitable Extinguishing Media: 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. 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 TWA Other Limits** 1. Interleukin-1.beta. (human) AChE-FAb' NA No data. No data. No data. Conjugate 26628-22-8 CEIL: 0.29 mg/m3 No data. 2. Sodium azide No data. Hazardous Components (Chemical Name) CAS # **Britain EH40** France VL Europe 1. Interleukin-1.beta. (human) AChE-FAb' NA No data. No data. No data. Conjugate 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 ma/m3 **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



SAFETY DATA SHEET Interleukin-1.beta. (human) AChE-FAb'

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layman I	nterleukin-1.	beta. (hu	man) AChE	-FAb' _F	Revision: 01/29/
		Conjug	ate		Revision: 04/12/
Other Protective Clothing:	Lab coat				
Respiratory Equipment (Specify Type):	NIOSH approved	respirator, as	conditions warrant.		
Work/Hygienic/Maintenance Practices:	Do not take interr	-			
	-	or utilizing thi	s material should be	equipped with an eyewa	ash and a safety
	shower. Wash thoroughly	after handling			
Environmental Exposure Controls:	No data available	-			
	Physical an		cal Proporti	05	
ט. Information on Basic Physical and Chemica	-		cal Flupelli	55	
Physical States:	-	.iquid [X]] Solid		
Appearance and Odor:	A lyophilized pov	-	100110		
Melting Point:	No data.	vuer			
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.				
		ity and F			
Reactivity:	10. Stabil		leactivity		
Stability:		Stable [X]			
Stability Note(s):			ith information lists	d on the product insert.	
Conditions To Avoid:	No data available		In mornation liste	a on the product insert.	
Polymerization:			[X]		
•	Will occur []	Will not occ	cur [X]		
Incompatibility - Materials To Avoid:	No data available				
Hazardous Decomposition Or Byproducts:	No data available	-			
	11. Toxicol				
Toxicological Information:	-		product have not be	en thoroughly studied.	
Chronic Toxicological Effects:	No data available				I
Hazardous Components (Chemical Name) . Interleukin-1.beta. (human) AChE-FAb'	CAS #	NTP n.a.	n.a.	ACGIH n.a.	n.a.
Conjugate		11.a.	11.a.	II.a.	11.d.
2. Sodium azide	26628-22-8	n.a.	n.a.	A4	n.a.



SAFETY DATA SHEET Interleukin-1.beta. (human) AChE-FAb'

Cayman Int	terleukin-1.	beta. (huma	n) AChE-FA	Ab' Rev	ision: 01/29/2013
		Conjugate			ision: 04/12/2006
	12. Ecolo	gical Inform	nation		
General Ecological Information:	Avoid release into	o the environment.			
	Runoff from fire	control or dilution	water may cause pol	lution.	
	13. Dispos	al Conside	rations		
Waste Disposal Method:	Dispose in accord	lance with local, sta	ate, and federal regul	ations.	
	14. Trans	sport Inform	nation		
LAND TRANSPORT (US DOT)		•			
DOT Proper Shipping Name	Not dangerous go	oods.			
LAND TRANSPORT (European ADR/RID)	0 0				
ADR/RID Shipping Name	Not dangerous go	oods.			
AIR TRANSPORT (ICAO/IATA)					
ICAO/IATA Shipping Name	Not dangerous go	ods			
Additional Transport Information:	0 0		state and federal	ulations	
	_		state, and federal reg	utations.	
	15. Regul	atory Inforr	nation		
European Community Hazard Symbol codes					
No data available.					
European Community Risk and Safety Phrase	es				
S24/25 - Avoid contact with skin and eye	s.				
S37/39 - Wear suitable gloves and eye/fac					
US EPA SARA Title III					
Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
. Interleukin-1.beta. (human) AChE-FAb'	NA	No	No	No	No
Conjugate					
2. Sodium azide	26628-22-8	Yes 500 LB	Yes 1000 LB	Yes	No
Other US EPA or State Lists			0144 1177 50		
Hazardous Components (Chemical Name)	CAS #		CWA NPDES	No TSCA	CA PROP.6
. Interleukin-1.beta. (human) AChE-FAb' Conjugate	INA INA	No	No		
2. Sodium azide	26628-22-8	No	No	Inventory	No
Regulatory Information Statement:	This SDS was pre	epared in accordance	ce with 29 CFR 1910	0.1200, Regulation (EC	C) No.1272/2008,
	and European Dir	rective 67/548/EEC	as amended.		
	16. Oth	ner Informat	tion		
Revision Date:	01/29/2013				
Company Policy or Disclaimer					
For research use only, not for human or veter.	inary use.				
DISCLAIMER: This information is believed	•	presents the best infor	mation currently availa	ble to us. However, we r	nake no warranty of
merchantability or any other warranty, expres	ss or implied, with res	pect to such informat	ion, and we assume no	liability resulting from it	s use. Users should
make their own investigations to determine the	ne suitability of the in	formation for their pa	rticular purposes.		
N.A.=Not available, N.P.=Not applicable, N.I	D.=Not determined, N	N.E.=Not established,	N.R.=Not required		

Product Information



Anti-Interleukin-1β (human) EIA Strip Plate Item No. 483312

COMMENTS:

Each plate is coated with the Interleukin-1 β (human) monoclonal antibody. This Safety Data Sheet (SDS) is for the antibody only. A 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: 01/29/2013 Supercedes Revision: 09/13/2009

Cayman Chemical

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E-Mail custserv@caymanchem.com

Web www.caymanchem.com



SAFETY DATA SHEET Interleukin-1.beta. (human) EIA Standard

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

Revision: 01/29/2013 Supercedes Revision: 09/22/2010

Product Code:	483314
Product Name:	Interleukin-1.beta. (human) EIA Standard
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
GHS Precaution Phrases:	according to GHS. 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):	 Handle as if capable of transmitting infectious agents. 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.
Farget Organs:	No data available.
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By	To the best of our knowledge, the toxicological properties have not been thoroughly investiga
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure:	To the best of our knowledge, the toxicological properties have not been thoroughly investiga
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. CO azardous Components (Chemical Name)	To the best of our knowledge, the toxicological properties have not been thoroughly investigated with the second structure of the second struct
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. Col lazardous Components (Chemical Name) . Interleukin-1.beta. (human) EIA Standard	To the best of our knowledge, the toxicological properties have not been thoroughly investigated with the second structure of the second struct
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. Col azardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard	To the best of our knowledge, the toxicological properties have not been thoroughly investigated with the properties have not been thoroughly invested with the properties have not been thoroughly invested
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. Col azardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide	To the best of our knowledge, the toxicological properties have not been thoroughly investigated with the second structure of the second struct
Signs and Symptoms Of Exposure: Medical Conditions Generally Aggravated By Exposure: 3. Col lazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide Emergency and First Aid Procedures:	To the best of our knowledge, the toxicological properties have not been thoroughly investigated with the properties have not been thoroughly invested with the properties have not been thoroughly invested
Hazardous Components (Chemical Name) . Interleukin-1.beta. (human) EIA Standard	CAS # Concentration on Ingredients NA NA NA NA A 99.99 % NA NA A 10.1 % 247-852-1 R28-32-50/53 VY805000 A. First Aid Measures Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained

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.



SAFETY DATA SHEET Interleukin-1.beta. (human) EIA Standard

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attention and special treatment needed:						
	5. Fire Fi	ghting Measure	S			
Suitable Extinguishing Media:		ant foam, carbon dioxide, v o cool fire-exposed contain	water, or dry chemical spray. ers.			
Unsuitable Extinguishing Media:	A solid water stre	am 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: 1	No data.			
Hazardous Combustion Products:	No data available.					
Fire Fighting Instructions:	-	-	apparatus pressure-demand (NI nt contact with skin and eyes.	OSH approved or		
6	6. Accidenta	I Release Meas	ures			
Protective Precautions, Protective	Avoid raising and	breathing dust, and provid	e adequate ventilation.			
Equipment and Emergency Procedures:		As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirate 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:			sposal in accordance with local			
	After removal, flush contaminated area and all cleaning materials with a 10% bleach aqueous solution.					
	7. Handl	ing and Storage	9			
Precautions To Be Taken in Handling:	-	lust/fume/gas/mist/vapours. or repeated exposure.	/spray.			
Precautions To Be Taken in Storing:	Keep container tig Store in accordance	ghtly closed. ce with information listed o	on the product insert.			
Hazard Label Information:	Avoid contact wit Wash thoroughly	h skin and eyes. Do not a after handling.	reuse this container. Use with	adequate ventilati		
8. Ex	posure Con	trols/Personal P	rotection			
lazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TWA	Other Limit		
. Interleukin-1.beta. (human) EIA Standard	NA	No data.	No data.	No data.		
. Sodium azide	26628-22-8	No data.	CEIL: 0.29 mg/m3	No data.		
lazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe		
. Interleukin-1.beta. (human) EIA Standard . Sodium azide	NA 26628-22-8	No data. TWA: 0.1 mg/m3 ()	No data. TWA: 0.1 mg/m3	No data. TWA: 0.1		
	20020-22-0	STEL: 0.3 mg/m3 ()	STEL: 0.3 mg/m3	mg/m3		
				STEL: 0.3 mg/m3		
Protective Equipment Summary - Hazard Label Information:	-		wash station in work area La t Hood	b coat Safety		
Engineering Controls (Ventilation etc.):	-	sures, local exhaust ventila mmended exposure limits.	tion, or other engineering contro	ols to control airbo		
Eye Protection:	Safety glasses					
	G (11 1	ical-resistant gloves				



Other Protective Clothing:

SAFETY DATA SHEET Interleukin-1.beta. (human) EIA Standard

Lab coat

Revision: 01/29/2013 Supercedes Revision: 09/22/2010

Respiratory Equipment (Specify Type):	NIOSH approved respirator, a	s conditions warrant.		
Work/Hygienic/Maintenance Practices:	Do not take internally.			
	Facilities storing or utilizing the	is material should be e	equipped with an eyewa	ash facility and a
	safety shower. Wash thoroughly after handlin	a		
Environmental Exposure Controls:	No data available.	g.		
-				
	Physical and Chem	ical Propertie	2S	
Information on Basic Physical and Chemical	-			
Physical States:	-	[] Solid		
Appearance and Odor:	A lyophilized powder			
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.	y		
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 or	ccur [X]		
Incompatibility - Materials To Avoid:	No data available.			
Hazardous Decomposition Or Byproducts:	No data available.			
	11. Toxicological I	nformation		
Toxicological Information:	The toxicological effects of th		en thoroughly studied	
Chronic Toxicological Effects:	No data available.			
lazardous Components (Chemical Name)	CAS # NTP	IARC	ACGIH	OSHA
. Interleukin-1.beta. (human) EIA Standard	NA n.a.	n.a.	n.a.	n.a.
. Sodium azide	26628-22-8 n.a.	n.a.	A4	n.a.
	12. Ecological Int	ormation		
General Ecological Information:	Avoid release into the environ			
-	Runoff from fire control or dil	ution water may cause	pollution.	
				Multi-region form



SAFETY DATA SHEET Interleukin-1.beta. (human) EIA Standard

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	13. Dispos	sal Conside	rations		
Waste Disposal Method:	Dispose in accord	lance with local, sta	te, and federal regul	ations.	
	14. Trans	sport Inform	ation		
LAND TRANSPORT (US DOT)					
DOT Proper Shipping Name	Not dangerous go	oods.			
LAND TRANSPORT (European ADR/RID)					
ADR/RID Shipping Name	Not dangerous go	oods.			
AIR TRANSPORT (ICAO/IATA)					
ICAO/IATA Shipping Name	Not dangerous go	oods.			
Additional Transport Information:	Transport in accordance with local, state, and federal regulations.				
	15. Regul	atory Inforn	nation		
European Community Risk and Safety Phrase S24/25 - Avoid contact with skin and eye	s.				
S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothi US EPA SARA Title III	s. nediately with plenty	ce protection.	Sec.304 RQ	Sec.313 (TRI)	Sec.110
S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imr S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name)	s. nediately with plenty ng, gloves and eye/fa	-	Sec.304 RQ No	Sec.313 (TRI)	Sec.110
 S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imr S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard 	s. nediately with plenty ng, gloves and eye/fac CAS #	Sec.302 (EHS)			
 S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothin US EPA SARA Title III Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide 	s. nediately with plenty ng, gloves and eye/fac CAS # NA	Sec.302 (EHS)	No	No	No
S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name) I. Interleukin-1.beta. (human) EIA Standard 2. Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name)	s. nediately with plenty ng, gloves and eye/fac CAS # NA	Sec.302 (EHS)	No	No	No
S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name) . Interleukin-1.beta. (human) EIA Standard 2. Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name) . Interleukin-1.beta. (human) EIA Standard	s. nediately with plenty ng, gloves and eye/fac CAS # 26628-22-8 CAS # NA	Sec.302 (EHS) No Yes 500 LB CAA HAP,ODC No	No Yes 1000 LB CWA NPDES No	No Yes TSCA No	No No CA PROP.6 No
S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide	s. nediately with plenty ng, gloves and eye/fac CAS # NA 26628-22-8 CAS # NA 26628-22-8	CAA HAP,ODC No No No No No	No Yes 1000 LB CWA NPDES No No	No Yes TSCA No Inventory	No No CA PROP.6 No No
 S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothin US EPA SARA Title III Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide Sodium azide 	s. nediately with plenty ng, gloves and eye/fac CAS # NA 26628-22-8 CAS # NA 26628-22-8 This SDS was pro	CAA HAP,ODC No No No No No	No Yes 1000 LB CWA NPDES No No e with 29 CFR 1910	No Yes TSCA No	No No CA PROP.6 No No
 S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imm S36/37/39 - Wear suitable protective clothin US EPA SARA Title III Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name) Interleukin-1.beta. (human) EIA Standard Sodium azide 	s. nediately with plenty ng, gloves and eye/fac CAS # NA 26628-22-8 CAS # NA 26628-22-8 This SDS was pre and European Din	CAA HAP,ODC No No No No No No Pared in accordanc	No Yes 1000 LB CWA NPDES No e with 29 CFR 1910 as amended.	No Yes TSCA No Inventory	No No CA PROP.6 No No
 S24/25 - Avoid contact with skin and eye S28 - After contact with skin, wash imr S36/37/39 - Wear suitable protective clothi US EPA SARA Title III Hazardous Components (Chemical Name) 1. Interleukin-1.beta. (human) EIA Standard 2. Sodium azide Other US EPA or State Lists Hazardous Components (Chemical Name) 1. Interleukin-1.beta. (human) EIA Standard 	s. nediately with plenty ng, gloves and eye/fac CAS # NA 26628-22-8 CAS # NA 26628-22-8 This SDS was pre and European Din	ce protection. Sec.302 (EHS) No Yes 500 LB CAA HAP,ODC No No epared in accordance rective 67/548/EEC	No Yes 1000 LB CWA NPDES No e with 29 CFR 1910 as amended.	No Yes TSCA No Inventory	No No CA PROP.6 No No

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