Product Information



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

COMMENTS:

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

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

WARNING:

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

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

Copyright Cayman Chemical Company

Revision Date: 09/09/2013 Supercedes Revision: 12/21/2012

Cayman Chemical

Mailing address 1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

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

Fax (734) 971-3640

E-Mail custserv@caymanchem.com

Web www.caymanchem.com



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

	accor	rding to Regulation (EC) No. 1907/2006 as amended by	(EC) No. 1272/2008
	Section 1. Id	lentification of the Substance/Mixture and of the	ne Company/Undertaking
.1	Product Code:	400035	
	Product Name:	Polysorbate 20	
	Synonyms:	Tween 20™;	
2	Relevant identified uses of	the substance or mixture and uses advised ag	ainst:
	Relevant identified uses:	For research use only, not for human or vetering	nary use.
.3	Details of the Supplier of th	e Safety Data Sheet:	
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	
	Web site address:	www.caymanchem.com	
	Information:	Cayman Chemical Company	+1 (734)971-3335
4	Emergency telephone numl		
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887
		Section 2. Hazards Identific	ation
.2.1	Labeling according to Reg	ulation (EC) No 4070/0000 [CLD].	
		ulation (EC) No 1272/2008 [CLP]:	
	CHS Signal Word:		
	GHS Signal Word:	ulation (EC) No 1272/2008 [CLP]: Warning	
	GHS Hazard Phrases:	Warning	
	GHS Hazard Phrases: H319: Causes serious eye in	Warning ritation.	
	GHS Hazard Phrases: H319: Causes serious eye iri H317: May cause an allergic	Warning ritation.	
	GHS Hazard Phrases: H319: Causes serious eye in	Warning ritation. skin reaction.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough	Warning ritation. skin reaction.	the manufacturer/supplier or the competent
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough	Warning ritation. skin reaction. ly after handling.	the manufacturer/supplier or the competent
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by	the manufacturer/supplier or the competent
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi P272: Contaminated work clo	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases:	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES:	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/ft P272: Contaminated work clo P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES: to do. Continue rinsing.	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fr P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES: to do. Continue rinsing. P337+313: If eye irritation pe	Warning ritation. skin reaction. Iy after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse. E Rinse cautiously with water for several minutes. For several minutes.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES: to do. Continue rinsing. P337+313: If eye irritation pe P302+352: IF ON SKIN: Was	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse. t Rinse cautiously with water for several minutes. For ersists, get medical advice/attention. sh with plenty of soap and water.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fr P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES: to do. Continue rinsing. P337+313: If eye irritation pe P302+352: IF ON SKIN: Was P333+313: If skin irritation or	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse. : Rinse cautiously with water for several minutes. F ersists, get medical advice/attention. sh with plenty of soap and water. rash occurs, seek medical advice/attention.	
	GHS Hazard Phrases: H319: Causes serious eye in H317: May cause an allergic GHS Precaution Phrases: P264: Wash hands thorough P280: Wear protective gloves authority. P261: Avoid breathing dust/fi P272: Contaminated work cle P362+364: Take off contamin GHS Response Phrases: P305+351+338: IF IN EYES: to do. Continue rinsing. P337+313: If eye irritation pe P302+352: IF ON SKIN: Was	Warning ritation. skin reaction. ly after handling. s/clothing and eye/face protection as specified by ume/gas/mist/vapours/spray. othing should not be allowed out of the workplace. nated clothing and wash it before reuse. : Rinse cautiously with water for several minutes. F ersists, get medical advice/attention. sh with plenty of soap and water. rash occurs, seek medical advice/attention.	

4
~
Cauman
CHIMICAL

Revision: 01/09/2015 Supersedes Revision: 12/09/2013

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

 2.3
 Adverse Human Health
 Causes serious eye irritation.

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

 May be harmful by inhalation, ingestion, or skin absorption.
 May cause an allergic skin reaction.

 May cause respiratory system irritation.
 To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
9005-64-5 TR7400000	Polyoxyethylenesorbitan Monolaurate (polysorbate 20; Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivatives)	100.0 %	500-018-3 NA	No data available.

		<u>Section</u> 4.	First Aid Measures					
1	Description of First Aid Measures:	No data available.						
	In Case of Inhalation:	Remove to fresh air. If no personnel. Get immediate	ot breathing, give artificial respiration or give oxygen by trained e medical attention.					
	In Case of Skin Contact:	•	ith soap and plenty of water for at least 15 minutes. Remove et medical attention if symptoms occur. Wash clothing before reuse.					
	In Case of Eye Contact:	Hold eyelids apart and flue examined and tested by a	ish eyes with plenty of water for at least 15 minutes. Have eyes medical personnel.					
	In Case of Ingestion:		ter provided person is conscious. Never give anything by mouth to an medical attention. Do NOT induce vomiting unless directed to do so by					
		Section 5. F	ire Fighting Measures					
1	Suitable Extinguishing	Use alcohol-resistant foa	m, carbon dioxide, water, or dry chemical spray.					
	Media:	ia: Use water spray to cool fire-exposed containers.						
	Unsuitable Extinguishing	A solid water stream may	y be inefficient.					
	Media:							
2	Flammable Properties an	d No data available.						
	Hazards:							
	Flash Pt:	No data.						
	Explosive Limits:	LEL: No data.	UEL: No data.					
	Autoignition Pt:	No data.						
3	Fire Fighting Instructions	•	contained breathing apparatus pressure-demand (NIOSH approved or ective gear to prevent contact with skin and eyes.					



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

			• • •	· · · · - ·					
				cidental Releas					
6.1	Protective Precautions, Avoid raising and breathing dust, and provide adequate ventilation.								
		Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator							
	Emerge	ency Procedures:	and appropriate pers	sonal protection (rubber	boots, safety goggles, and I	neavy rubber gloves).			
6.2	Enviror	nmental	Take steps to avoid	release into the environ	ment, if safe to do so.				
	Precaut	tions:							
6.3			Contain spill and coll						
		ment and Cleanin	gTransfer to a chemic	al waste container for c	lisposal in accordance with le	ocal regulations.			
	Up:								
			Section 7.	Handling and	Storage				
7.1	Precaut	tions To Be Taken	Avoid breathing dust/	fume/gas/mist/vapours	/spray.				
	in Hand	lling:	Avoid prolonged or re	epeated exposure.					
7.2	Precaut	tions To Be Taken	Keep container tightly						
	in Stori	ng:	Store in accordance	with information listed o	on the product insert.				
		Sec	tion 8. Exposu	ire Controls/Pe	rsonal Protection				
8.1	Exposu	re Parameters:							
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe			
900	5-64-5	1	orbitan Monolaurate	No data.	No data.	No data.			
		(polysorbate 20; Sorbitan,							
		monododecanoate,							
		poly(oxy-1,2-ethanediyl) derivatives							
<u></u>	#					Other Limite			
		Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits			
	# 5-64-5	Partial Chemical Polyoxyethylenes	Name orbitan Monolaurate	OSHA TWA No data.	ACGIH TWA No data.	Other Limits No data.			
		Partial Chemical	Name orbitan Monolaurate Sorbitan,						
		Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat	Name orbitan Monolaurate Sorbitan,						
900	5-64-5	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat	Name orbitan Monolaurate Sorbitan, e,						
900 8.2	5-64-5 Exposu	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-etha	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives)	No data.		No data.			
900 8.2	5-64-5 Exposu Engine	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-ethat re Controls:	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu	No data.	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-ethat re Controls: ering Controls	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm	No data. res, local exhaust venti	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engine (Ventila Person	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-etha re Controls: ering Controls ttion etc.):	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm	No data. res, local exhaust venti	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila Person Eye Pro	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-ethat re Controls: ering Controls tion etc.): al protection equi	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment:	No data. res, local exhaust venti ended exposure limits.	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila Person Eye Pro Protect	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-etha re Controls: ering Controls ttion etc.): al protection equi	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical	No data. res, local exhaust venti ended exposure limits.	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila Person Eye Pro Protect Other P	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-ethat re Controls: ering Controls tion etc.): al protection equi otection: ive Gloves:	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat	No data. res, local exhaust venti ended exposure limits.	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila Person Eye Pro Protect Other P Respira	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-etha re Controls: ering Controls ttion etc.): al protection equi otection: ive Gloves: protective Clothing	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat	No data. res, local exhaust venti ended exposure limits. -resistant gloves	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposur Engined (Ventila Person Eye Pro Protect Other P Respira (Specify	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoat poly(oxy-1,2-etha re Controls: ering Controls al protection equi otection: ive Gloves: Protective Clothing atory Equipment y Type):	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat	No data. res, local exhaust venti ended exposure limits. -resistant gloves pirator, as conditions w	No data.	No data.			
900 8.2 8.2.1	5-64-5 Exposur Engined (Ventila Person Eye Pro Protect Other P Respira (Specify	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoati poly(oxy-1,2-ethat re Controls: ering Controls al protection equi otection: ive Gloves: Protective Clothing atory Equipment y Type): ygienic/Maintenar	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res	No data. res, local exhaust venti ended exposure limits. -resistant gloves pirator, as conditions w	No data.	No data.			
CAS ; 900 8.2 8.2.1 8.2.2	5-64-5 Exposu Engined (Ventila Person Eye Pro Protect Other P Respira (Specify Work/H	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoati poly(oxy-1,2-ethat re Controls: ering Controls al protection equi otection: ive Gloves: Protective Clothing atory Equipment y Type): ygienic/Maintenar	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res Do not take internally Facilities storing or ut shower.	No data. res, local exhaust venti ended exposure limits. -resistant gloves pirator, as conditions w /. tilizing this material sho	No data. lation, or other engineering c	No data.			
900 8.2 8.2.1	5-64-5 Exposu Engined (Ventila Person Eye Pro Protect Other P Respira (Specify Work/H	Partial Chemical Polyoxyethylenes (polysorbate 20; monododecanoati poly(oxy-1,2-ethat re Controls: ering Controls al protection equi otection: ive Gloves: Protective Clothing atory Equipment y Type): ygienic/Maintenar	Name orbitan Monolaurate Sorbitan, e, nediyl) derivatives) Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res	No data. res, local exhaust venti ended exposure limits. -resistant gloves pirator, as conditions w /. tilizing this material sho	No data. lation, or other engineering c	No data.			



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

).1	Section 9. Physical and Chemical Properties Information on Basic Physical and Chemical Properties									
7.1	Physical States: []Gas [X]Liquid []S					lid				
	-			A clear, yellow vis		iiu				
	Appearance and Odor: Melting Point: Boiling Point:			No data.						
				No data.						
	Flash Pt:			No data.						
	Evaporat			No data.						
	Explosive			LEL: No data.		UEL: No	data			
	-	essure (vs. Air o	r mm	No data.		OLL. NO	data.			
	Hg):			no dala.						
		nsity (vs. Air = 1):	No data.						
	=	Gravity (Water =	-	No data.						
	=	in Water:	•,•	No data.						
	Autoignit			No data.						
9.2	-			No dala.						
	Other Information Percent Volatile:			N.A.						
	Percent	rolatile:		IN.A.						
			S	ection 10. S	tability and	Reactiv	vity			
0.1	Reactivity	y:	No dat	a available.						
0.2	Stability:		Unstab	le [] Stable	[X]					
0.3	Stability I	Note(s):	Stable	Stable if stored in accordance with information listed on the product insert.						
	Polymeria	zation:	Will oc	/ill occur [] Will not occur [X]						
0.4	Condition	ns To Avoid:	No dat	a available.						
0.5	Incompat	ibility - Materials	s strong	oxidizing agents						
	To Avoid	:								
0.6	Hazardou	IS	carbon	arbon dioxide						
	Decompo	osition Or	carbon	oon monoxide						
	Byproduc	cts:								
			Se	ction 11. To	xicological	Informa	ation			
1.1	Informati	on on		toxicological effects of this product have not been thoroughly studied.						
		gical Effects:		0	·		5,			
	•	-	Polyso	olysorbate 20 - Toxicity Data: Oral LD50 (rat): 36.7 ml/kg; Oral LD50 (hamster): 18 ml/kg; Oral						
				mouse): >33 g/kg;					-	
	Chronic 1	Foxicological	Polyso	olysorbate 20 - Investigated as a tumorigen and reproductive effector.						
	Effects:	-	Only se	elect Registry of T	oxic Effects of Ch	nemical Sub	stances (RTE	CS) data is pre	esented here	
			See ac	tual entry in RTEC	S for complete in	nformation.				
			Polyso	rbate 20 RTECS N	umber: TR7400	000				
Carcir	nogenicity	:	NTP? I	No IARC Mor	nographs? No	OSHA Re	gulated? No			
CAS	#	Hazardous Com	ponent	s (Chemical Nam	e)	NTP	IARC	ACGIH	OSHA	
900	5-64-5	Polyoxyethylenes	sorbitan	Monolaurate (poly	sorbate 20;	n.a.	n.a.	n.a.	n.a.	
			odecano	ate, poly(oxy-1,2-	ethanediyl)					
	Sorbitan, monododecar derivatives)									



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

			Section 12. Ecolo	ogical Informa	ation	
12.1	Toxicity	:	Avoid release into the environm	ent.		
			Runoff from fire control or dilution	on water may cause	pollution.	
12.2	Persiste	nce and	No data available.			
	Degrada	ıbility:				
12.3	Bioaccu	mulative	No data available.			
	Potentia	l:				
12.4	Mobility	in Soil:	No data available.			
12.5	Results	of PBT and vPvB	No data available.			
	assessn	nent:				
			Section 13. Dispos	sal Considera	ations	
13.1	Waste D	isposal Method:	Dispose in accordance with loca	al, state, and federal	regulations.	
			Section 14. Tran	sport Informa	ation	
14.1	LAND T	RANSPORT (US	DOT):			
D	OT Prope	r Shipping Name	: Not dangerous goods.			
_	OT Hazar					
	N/NA Nur	nber:				
14.1	LAND T	RANSPORT (Eur	opean ADR/RID):			
		hipping Name:	Not dangerous goods.			
-	N Numbe					
14.3		ss. Ansport (ICAO/	IATA).			
		Shipping Name:	Not dangerous goods.			
	tional Trai		Transport in accordance with lo	cal state and feder	al regulations	
	mation:	isport			a regulations.	
			Section 15. Regu	latory Inform	ation	
		uporfund Amondm	nents and Reauthorization Act	•		
CAS			ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
	5-64-5		sorbitan Monolaurate	No	No	No
			Sorbitan, monododecanoate,			
		poly(oxy-1,2-etha	anediyl) derivatives)			
CAS	#	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists	
900	5-64-5		sorbitan Monolaurate	· ·	No; CWA NPDES:	No; TSCA: Yes -
		- · ·	Sorbitan, monododecanoate,	Inventory; CA PI	ROP.65: No	
		poly(oxy-1,2-etha	anediyl) derivatives)			



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
	Section 16. Other Information
Revision Date:	01/09/2015
Additional Information About	No data available.
This Product:	
Company Policy or Disclaimer:	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.



SAFETY DATA SHEET EIA Tracer Dye

Revision: 01/09/2015 Supersedes Revision: 04/02/2014

		accor	ding to Regulation (EC) No. 190	7/2006 as amended b	oy (EC) No. 1272/20	08
		Section 1. Id	lentification of the Substar	nce/Mixture and of	the Company/U	Indertaking
1.1	Product Product		400040 EIA Tracer Dye			
1.2	Relevan	t identified uses of	the substance or mixture a	and uses advised a	against:	
	Releva	ant identified uses:	For research use only, ne	ot for human or vete	erinary use.	
1.3	Details of	of the Supplier of th	e Safety Data Sheet:			
		any Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	bany		
		ite address:	www.caymanchem.com		4 (70	4)074 0005
	Inform –		Cayman Chemical Comp	bany	+1 (73	4)971-3335
1.4	Emerge	ncy telephone num	ber:			
	Emerg	ency Contact:	CHEMTREC Within USA CHEMTREC Outside US		•	00)424-9300 03)527-3887
			Section 2. Ha	zards Identifi	cation	
2.2 2.2.1	Label El Labelin GHS Sig GHS Ha H316: C GHS Pr No phra GHS Re P332+3 GHS St Please	gnal Word: azard Phrases: Causes mild skin irrita ecaution Phrases: ses apply. esponse Phrases: 13: If skin irritation oc orage and Disposal refer to Section 7 for	ulation (EC) No 1272/2008 Warning tion. ccurs, get medical advice/atte Phrases: Storage and Section 13 for I	ention.	1.	
2.3		and Symptoms:	Causes mild skin irritation. Material may be irritating to t May be harmful by inhalation May cause eye or respiratory May temporarily stain skin. To the best of our knowledge	, ingestion, or skin a v system irritation.	absorption.	spiratory tract. t been thoroughly investigated.
		Sectio	on 3. Composition	/Information	on Ingredie	nts
CAS RTEC		Hazardous Compo REACH Registratio	nents (Chemical Name)/ on No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA		EIA Tracer Dye		100.0 %	NA NA	Skin Corr. 3: H316
		·				



SAFETY DATA SHEET EIA Tracer Dye

Revision: 01/09/2015 Supersedes Revision: 04/02/2014

			Section	4. First Aid Me	easures	
4.1		ption of First Aid	No data available.			
	Measu In Cas	res: e of Inhalation:	Remove to fresh air. Get immediate media	0.0	rtificial respiration or give oxy	gen by trained personnel.
	In Cas	e of Skin Contact:	-		y of water for at least 15 minu occur. Wash clothing before	
	In Cas	e of Eye Contact:	Hold eyelids apart ar and tested by medica	•	ty of water for at least 15 minu	utes. Have eyes examined
	In Cas	e of Ingestion:			n is conscious. Never give an Do NOT induce vomiting unl	
			Section 5.	. Fire Fighting	Measures	
5.1	Media			cool fire-exposed conta	, water, or dry chemical spray iners.	
5.2	Media: Flamm Hazaro	able Properties an	d No data available.			
	Flash	Pt:	No data.			
	Explos	sive Limits:	LEL: No data.	UEL:	No data.	
	Autoig	nition Pt:	No data.			
5.3	Fire Fi	ghting Instructions	-		g apparatus pressure-demane ent contact with skin and eye	
			Section 6. Ac	ccidental Relea	se Measures	
6.1	Protec	tive Precautions, tive Equipment an ency Procedures:	d As conditions warra		ate ventilation. roved self-contained breathing er boots, safety goggles, and	
6.2	Enviro Precau	nmental utions:	Take steps to avoid	release into the enviro	nment, if safe to do so.	
6.3			r Contain spill and co ngTransfer to a chemi		disposal in accordance with I	ocal regulations.
			Section 7	. Handling and	d Storage	
7.1 7.2	in Han	dling:	Avoid breathing dust Avoid prolonged or r Keep container tight		s/spray.	
	in Stor	ring:	Store in accordance	with information listed	on the product insert.	
		Sec	tion 8. Exposi	ure Controls/Pe	ersonal Protection	
8.1	•	ure Parameters:		1		
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe
	NA	EIA Tracer Dye		No data.	No data.	No data.
						Multi-region format



SAFETY DATA SHEET EIA Tracer Dye

Revision: 01/09/2015

CAS	# Partial Chemical		Name	OSHA TWA	ACGIH TWA	Other Limits	
	NA	EIA Tracer Dye		No data.	No data.	No data.	
3.2	Expos	ure Controls:		Į		Į	
3.2.1							
	(Venti	lation etc.):	levels below recor	mmended exposure limits.			
8.2.2	Perso	nal protection equip	oment:				
	Eye Pı	rotection:	Safety glasses				
	Protec	ctive Gloves:	Compatible chemi	ical-resistant gloves			
	Other	Protective Clothing	:Lab coat				
	Respir	ratory Equipment	NIOSH approved	respirator, as conditions w	varrant.		
	(Speci	ify Type):					
	Work/	Hygienic/Maintenan	Do not take intern	ally.			
	ce Pra	ictices:	Facilities storing o	or utilizing this material sho	ould be equipped with an eyew	vash facility and a safe	
			shower.				
			Wash thoroughly a	after handling.			
			No data available.				
		S	ection 9. Ph	ysical and Chem	nical Properties		
9.1	Inform	ation on Basic Phys	ical and Chemica	I Properties			
	Physic	cal States:	[] Gas	[X]Liquid []Solid	l		
	Appea	arance and Odor:	A red solut	tion			
	Meltin	g Point:	No data.				
	Boiling	g Point:	No data.				
	Flash	Pt:	No data.				
	Evapo	oration Rate:	No data.				
	Explos	sive Limits:	LEL: No d	lata.	UEL: No data.		
	Vapor	Pressure (vs. Air o	mm No data.				
	Hg):						
	-	Density (vs. Air = 1	-				
	-	fic Gravity (Water =	-				
	Solubi	ility in Water:	No data.				
	Autoig	gnition Pt:	No data.				
9.2	Other I	Information					
	Percei	nt Volatile:	No data.				
			Section 1	10. Stability and	Reactivity		
10.1	Reacti	ivity:	No data available.				
10.2	Stabili	ity:	Unstable []	Stable [X]			
10.3	Stabili	ity Note(s):	Stable if stored in	accordance with informati	ion listed on the product inser	t.	
	Polym	erization:	Will occur []	Will not occur [X]			
10.4	Condi	tions To Avoid:	No data available.				
10.5	Incom	patibility - Materials	No data available.				
	To Av	oid:					
10.6	Hazaro	dous	No data available.				
		nposition Or					
		ducts:					
						Multi-region for	



SAFETY DATA SHEET EIA Tracer Dye

Multi-region format

Revision: 01/09/2015 Supersedes Revision: 04/02/2014

			Sectio	n 11. Toxic	ological Info	ormation			
1.1	Informa		The toxicological effects of this product have not been thoroughly studied.						
Toxicological Effects:									
	nogenicit	-	NTP? No	IARC Monogra		HA Regulated?			
CAS		Hazardous Com	ponents (Ch	emical Name)	NT	P IARC		I OSHA	
	NA	EIA Tracer Dye			n.a	. n.a.	n.a.	n.a.	
			Sect	ion 12. Eco	logical Infor	mation			
12.1	Toxicity	/:	Avoid releas	se into the environ	iment.				
			Runoff from	fire control or dilu	ition water may ca	use pollution.			
12.2	Persiste	ence and	No data ava	ilable.					
	Degrad	ability:							
12.3		umulative	No data ava	ilable.					
	Potentia								
2.4	-	/ in Soil:	No data ava						
12.5	Results	of PBT and vPvB	No data ava	ilable.					
	assessi	ment:							
			Sectio	on 13. Dispo	osal Consid	erations			
13.1	Waste I	Disposal Method:	Dispose in a	ccordance with lo	ocal, state, and fee	leral regulations	5.		
			Sec	tion 14. Tra	nsport Infor	mation			
14.1	LAND	RANSPORT (US	DOT):						
D	OT Prope	er Shipping Name	: Not dan	igerous goods.					
	OT Haza			0 0					
U	N/NA Nu	mber:							
14.1	LAND 1	FRANSPORT (Eur	opean ADR/F	RID):					
А	DR/RID S	Shipping Name:	Not dan	igerous goods.					
U	N Numbe	er:							
Н	azard Cla	ass:							
14.3	AIR TR	ANSPORT (ICAO/	IATA):						
IC	CAO/IATA	Shipping Name:	Not dan	gerous goods.					
	tional Tra	nsport	Transport in	accordance with	local, state, and f	ederal regulation	ns.		
Infor	mation:								
			Secti	on 15. Reg	ulatory Infor	rmation			
EPA	SARA (Si	uperfund Amendn	nents and Re	authorization Ac	t of 1986) Lists				
CAS		Hazardous Com	ponents (Ch	emical Name)	S. 302 (EHS)) S. 304 F	RQ S.	313 (TRI)	
	NA	EIA Tracer Dye			No	No	No)	
		Hazardous Components (Chemical Name)			Other US EP	A or State List	6		
CAS	#	Hazardous Com	EIA Tracer Dye			CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			



SAFETY DATA SHEET EIA Tracer Dye

Degulatory Information	This SDS was prepared in accordance with 20 CER 1010 1200 and Regulation (EC)
Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
	Section 16. Other Information
Revision Date:	01/09/2015
Additional Information About This Product:	No data available.
This Product: Company Policy or Disclaimer:	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.



Revision: 01/09/2015 Supersedes Revision: 04/02/2014

		ing to Regulation (EC) No. 1907/2006 as amended by	(EC) No. 1272/2008				
	Section 1. Ide	entification of the Substance/Mixture and of the	ne Company/Undertaking				
I	Product Code:	400042					
	Product Name:	EIA Antiserum Dye					
.2	Relevant identified uses of the substance or mixture and uses advised against:						
	Relevant identified uses:	For research use only, not for human or vetering	nary use.				
.3	Details of the Supplier of the	Safety Data Sheet:					
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108					
	Web site address:	www.caymanchem.com					
	Information:	Cayman Chemical Company	+1 (734)971-3335				
.4	Emergency telephone numb						
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887				
		Section 2. Hazards Identific	ation				
	Carcinogenicity, Category Toxic To Reproduction, Ca Label Elements: Labeling according to Regu	ntegory 2					
	Toxic To Reproduction, Ca Label Elements:	2					
2.2.1	Toxic To Reproduction, Ca Label Elements:	2 htegory 2 lation (EC) No 1272/2008 [CLP]:					
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu	2 ategory 2					
.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word:	2 ategory 2 lation (EC) No 1272/2008 [CLP]: Warning					
.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases:	2 ategory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer.					
.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases:	2 attegory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. g fertility or the unborn child.					
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases: P201: Obtain special instruction	2 attegory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. g fertility or the unborn child.					
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases: P201: Obtain special instruction P202: Do not handle until all s	2 attegory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. 9 fertility or the unborn child. ons before use. safety precautions have been read and understoo	od.				
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases: P201: Obtain special instruction P202: Do not handle until all ss P281: Use personal protective	2 attegory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. 9 fertility or the unborn child. ons before use. safety precautions have been read and understoo	od.				
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases: P201: Obtain special instruction P202: Do not handle until all s P281: Use personal protective GHS Response Phrases:	2 ategory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. g fertility or the unborn child. ons before use. safety precautions have been read and understood a equipment as required.	od.				
2.2.1	Toxic To Reproduction, Ca Label Elements: Labeling according to Regu GHS Signal Word: GHS Hazard Phrases: H351: Suspected of causing of H361: Suspected of damaging GHS Precaution Phrases: P201: Obtain special instruction P202: Do not handle until all s P281: Use personal protective GHS Response Phrases:	2 attegory 2 lation (EC) No 1272/2008 [CLP]: Warning sancer. g fertility or the unborn child. ons before use. safety precautions have been read and understoo e equipment as required. cerned: Get medical attention/advice.	od.				



2.3	man	EIA	Antiserum Dy	ve	Revision: 01/09/2015
2.3					Supersedes Revision: 04/02/2014
	Adverse Human Healt Effects and Symptoms	 May be harmful by inhalation May cause eye, skin, or resp Suspected of causing cance Suspected of damaging fertil 	n, ingestion, or skin a piratory system irritat r. lity or the unborn chi	absorption. ion. Id.	spiratory tract. t been thoroughly investigated.
	Se	ection 3. Composition	/Information	on Ingredie	nts
CAS # RTEC		mponents (Chemical Name)/ tration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	EIA Antiserum D	ye	100.0 %	NA NA	Carcinogen 1B: H350 Toxic Repro. 2: H361
		Section 4. Fi	rst Aid Meas	ures	
.1	Description of First Ai Measures:	d No data available.			
	In Case of Inhalation:	Remove to fresh air. If not broke the second		al respiration or gi	ve oxygen by trained personne
	In Case of Skin Conta	ct: Immediately wash skin with s clothing. Get medical attention			5 minutes. Remove contaminat before reuse.
	In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes exam and tested by medical personnel.				
	In Case of Ingestion:	Wash out mouth with water p unconscious person. Get me medical personnel.	-	-	ive anything by mouth to an ng unless directed to do so by
		Section 5. Fire	Fighting Me	asures	
5.1	Suitable Extinguishing Media:	Use alcohol-resistant foam, o Use water spray to cool fire-o		-	spray.
	Unsuitable Extinguish Media:	ing A solid water stream may be	inefficient.		
5.2	Flammable Properties Hazards:	andNo data available.			
	Flash Pt: Explosive Limits:	No data. LEL: No data.	UEL: No da	ata.	
	Autoignition Pt:	No data.			



Revision: 01/09/2015 Supersedes Revision: 04/02/2014

Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or resp Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves Precautions: 3.3 Methods and Material For Contain spill and collect, as appropriate. Containment and CleaningTransfer to a chemical waste container for disposal in accordance with local regulations. Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/tume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. 2.2 Presonal protection equipment: 8.2.2 Exposure Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protective Clorking: Lab coal Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.										
Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or resp Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves Precautions: 1.2 Environmental Take steps to avoid release into the environment, if safe to do so. Precautions: 1.3 Methods and Material For Contain spill and collect, as appropriate. Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 1.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGH TWA Other Lim NA EIA Antiserum Dye No data. No data. A No data. 2.2 Prosonal protection equipment: 2.3.2 Exposure Controls: 2.3.2 Exposure Controls: 2.3.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygleinic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.				Section 6. Ac	cidental Releas	e Measures				
Emergency Procedures: and appropriate personal protection (rubber boots, safety goggles, and heavy rubber glover 5.2 Environmental Take steps to avoid release into the environment, if safe to do so. Precautions: Section 7. Handling and Storage Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. up: Section 7. Handling and Storage Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. Avoid prolonged or repeated exposure. France VL Europe 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.1	6.1	Protect	ive Precautions,	Avoid breathing vapo	ors and provide adequa	te ventilation.				
6.2 Environmental Take steps to avoid release into the environment, if safe to do so. Precautions: Section 7: Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Repeated exposure NA El Anni Section 8. Exposure Controls/Personal Protection 8.1 Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. NA EIA Antiserum Dye No data. No data. Resposure Controls 8.2 Exposure Controls Store in accordance with information listed on the product insert. Store in accordance with information liste		Protect	ive Equipment ar	d As conditions warran	it, wear a NIOSH appro	ved self-contained breathing	apparatus, or respira			
Precautions: 6.3 Methods and Material For Contain spill and collect, as appropriate. Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. In Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. In Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. RAS # Partial Chemical Name OSHA TWA ACGH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. RAS # Partial Chemical Name OSHA TWA ACGH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. Resposure Controls: Bartian EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data.		Emerge	ency Procedures:	and appropriate pers	onal protection (rubber	boots, safety goggles, and h	eavy rubber gloves).			
 6.3 Methods and Material For Contain spill and collect, as appropriate. Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. 	6.2	Enviror	imental	Take steps to avoid r	release into the environ	ment, if safe to do so.				
Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations. Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. Na data. No data. No data. No data. No data. No data. Na data data. No data. No data. No data. No data. No data. No data. No data. No data. No data. Vertection: Safety glasses <td co<="" td=""><td></td><td>Precaut</td><td>tions:</td><td></td><td></td><td></td><td></td></td>	<td></td> <td>Precaut</td> <td>tions:</td> <td></td> <td></td> <td></td> <td></td>		Precaut	tions:						
Up: Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data. No data.<	6.3	Method								
Section 7. Handling and Storage Section 7. Handling and Storage 7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. No data. No data. Respirator Controls: Batery Gentrols: Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. Batery Gentrols: Compatible chemical-resistant gloves Other Protection equipment: <th c<="" td=""><td></td><td colspan="8">Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.</td></th>	<td></td> <td colspan="8">Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.</td>		Containment and Cleaning Transfer to a chemical waste container for disposal in accordance with local regulations.							
7.1 Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray. in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. Resposure Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat <t< td=""><td></td><td>Up:</td><td></td><td></td><td></td><td></td><td></td></t<>		Up:								
in Handling: Avoid prolonged or repeated exposure. 7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. 8.2 Exposure Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.				Section 7.	Handling and	Storage				
7.2 Precautions To Be Taken Keep container tightly closed. in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. No data. No data. Sectorrols: B2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan D not take internally. ce Practices: Facilitities storing or utilizing	7.1	Precaut	tions To Be Take	n Avoid breathing dust/	fume/gas/mist/vapours/	spray.				
in Storing: Store in accordance with information listed on the product insert. Section 8. Exposure Controls/Personal Protection Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA A CGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: 8.2 Exposure Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan D o not take internally.		in Hanc	lling:	Avoid prolonged or re	epeated exposure.					
Section 8. Exposure Controls/Personal Protection Section 8. Exposure Controls/Personal Protection 8.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. Response Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. B.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. Ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.	7.2	Precaut	tions To Be Take	n Keep container tightly	/ closed.					
B.1 Exposure Parameters: CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: Berocess enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protective: Compatible chemical-resistant gloves Other Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. Wash thoroughly after handling.		in Stori	ng:	Store in accordance	with information listed o	n the product insert.				
CAS # Partial Chemical Name Britain EH40 France VL Europe NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. RA EIA Antiserum Dye No data. No data. No data. NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): Ievels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. E Facilities storing or utilizing this material should be equipped wit			Sec	tion 8. Exposu	re Controls/Pe	rsonal Protection				
NA EIA Antiserum Dye No data. No data. No data. CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. Other Lim NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: Base process enclosures, local exhaust ventilation, or other engineering controls to control a (Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower.	B.1	Exposu	re Parameters:							
CAS # Partial Chemical Name OSHA TWA ACGIH TWA Other Lim NA EIA Antiserum Dye No data. No data. No data. No data. 8.2 Exposure Controls:	CAS	#	Partial Chemica	I Name	Britain EH40	France VL	Europe			
NA EIA Antiserum Dye No data. No data. No data. 8.2 Exposure Controls: 8.2.1 Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to control a levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. Wash thoroughly after handling.		NA	EIA Antiserum D	уе	No data.	No data.	No data.			
8.2 Exposure Controls: 8.2.1 Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control a levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.	CAS	#	Partial Chemica	I Name	OSHA TWA	ACGIH TWA	Other Limits			
8.2.1 Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control a levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Vont Ake internally. Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. Wash thoroughly after handling.		NA	EIA Antiserum D	уе	No data.	No data.	No data.			
(Ventilation etc.): levels below recommended exposure limits. 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. Wash thoroughly after handling.	8.2	Exposu	re Controls:							
 8.2.2 Personal protection equipment: Eye Protection: Safety glasses Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling. 	8.2.1	Engine	ering Controls	Use process enclosu	res, local exhaust ventil	ation, or other engineering c	ontrols to control airbo			
Eye Protection:Safety glassesProtective Gloves:Compatible chemical-resistant glovesOther Protective Clothing: Lab coatNIOSH approved respirator, as conditions warrant.Respiratory EquipmentNIOSH approved respirator, as conditions warrant.(Specify Type):Do not take internally.Work/Hygienic/MaintenanDo not take internally.Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.		(Ventila	ition etc.):	levels below recomm	ended exposure limits.					
Protective Gloves: Compatible chemical-resistant gloves Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.	8.2.2	Person	al protection equ	ipment:						
Other Protective Clothing:Lab coat Respiratory Equipment NIOSH approved respirator, as conditions warrant. (Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.		Eye Pro	otection:	Safety glasses						
Respiratory EquipmentNIOSH approved respirator, as conditions warrant.(Specify Type):Do not take internally.Work/Hygienic/MaintenanDo not take internally.ce Practices:Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower.Wash thoroughly after handling.		Protect	ive Gloves:	Compatible chemical						
(Specify Type): Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.										
Work/Hygienic/Maintenan Do not take internally. ce Practices: Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.			rotective Clothin	g:Lab coat	J. J					
ce Practices:Facilities storing or utilizing this material should be equipped with an eyewash facility and a shower. Wash thoroughly after handling.				-	-	arrant.				
shower. Wash thoroughly after handling.		Respira	atory Equipment	-	-	arrant.				
Wash thoroughly after handling.		Respira (Specify	atory Equipment y Type):	NIOSH approved res	pirator, as conditions wa	arrant.				
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved res	pirator, as conditions wa		wash facility and a saf			
No data available		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved res n Do not take internally Facilities storing or ut shower.	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved res n Do not take internally Facilities storing or ut shower.	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved res n Do not take internally Facilities storing or ut shower.	pirator, as conditions wa		wash facility and a sa			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses of the second state o	pirator, as conditions wa		wash facility and a saf			
		Respira (Specif Work/H	atory Equipment y Type): ygienic/Maintena	NIOSH approved responses to take internally Facilities storing or ut shower.	pirator, as conditions wa		wash facility and a saf			



Revision: 01/09/2015 Supersedes Revision: 04/02/2014

9.1	Information			Physical a			575100		
9.1		nformation on Basic Physical and Chemical Properties Physical States: []Gas [X]Liquid []Solid							
	Appearance and Odor: A blue solution								
	Melting Poi		No d						
	Boiling Poir		No d						
	Flash Pt:		No d						
	Evaporation	n Rate:	No d	data.					
	Explosive L		LEL:	: No data.		UEL: No	o data.		
	-	sure (vs. Air or	mm Nod	data.					
	Hg):								
	Vapor Dens	sity (vs. Air = 1)): No d	data.					
	Specific Gra	avity (Water = ²	1): No d	data.					
	Solubility in	olubility in Water: No data.							
	Autoignitio	n Pt:	No d	data.					
9.2	Other Inform	nation							
	Percent Vol	atile:	No d	data.					
			Secti	ion 10. Stat	bility and	Reactiv	vity		
10.1	Reactivity:		No data ava				,		
10.2	Stability:		Unstable [] Stable [X]					
10.3	0.3 Stability Note(s): Stable if stored in accordance with information listed on the product insert.								
	Polymerizat	tion:	Will occur [] Will not oc	cur [X]				
10.4	Conditions	To Avoid:	No data ava	ailable.					
10.5	Incompatibi	ility - Materials	strong oxidiz	zing agents					
	To Avoid:								
10.6	Hazardous		No data ava	ailable.					
	Decomposi	tion Or							
	Byproducts	\$I							
			Sectio	on 11. Toxic	ological	Informa	ation		
11.1	Information	on	The toxicolo	ogical effects of th	is product ha	ve not beer	n thoroughly s	tudied.	
	Toxicologic	al Effects:							
	Chronic To	Chronic Toxicological Contains a component that has been inve			stigated as	a carcinogen.			
	Effects:								
	Carcinogenicity/Other Contains a component that has been rep			-	-	robably carcir	nogenic based	on its IARC,	
	Information	12	OSHA, ACO	GIH, NTP, or EPA	classification).			
Carci	nogenicity:		NTP? No	IARC Monogra	aphs? Yes	OSHA Re	egulated? No		
CAS # Hazardous Co		azardous Comp	-	emical Name)		NTP	IARC	ACGIH	OSHA
	NA EL	A Antiserum Dy	-			n.a.	n.a.		n.a.



	Revision:	01/09/2015
Supersedes	Revision:	04/02/2014



Revision: 01/09/2015 Supersedes Revision: 04/02/2014

use. Users should make their own investigations to determine the suitability of the information for their particular purposes.



Revision: 03/18/2015 Supersedes Revision: 01/09/2015

			Supersedes Revision: 01/09/201					
	ассо	rding to Regulation (EC) No. 1907/2006 as amended by ((EC) No. 1272/2008					
	Section 1. Id	dentification of the Substance/Mixture and of th	ne Company/Undertaking					
.1	Product Code:	400050						
	Product Name:	Ellman's Reagent						
.2	Relevant identified uses of	the substance or mixture and uses advised aga	ainst:					
	Relevant identified uses:	For research use only, not for human or vetering	nary use.					
.3	Details of the Supplier of the	ne Safety Data Sheet:						
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108						
	Web site address:	www.caymanchem.com						
	Information:	Cayman Chemical Company	+1 (734)971-3335					
.4	Emergency telephone num							
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887					
		Section 2. Hazards Identifica	ation					
.1	Classification of the Substa	ance or Mixture:						
 .1.1								
	Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3							
	Acute Toxicity: Oral, Category 3 Acute Toxicity: Skin, Category 3							
	Skin Corrosion/Irritation,							
	Serious Eye Damage/Eye							
.2	Label Elements:							
.2.1		ulation (EC) No 1272/2008 [CLP]:						
	24E							
	GHS Signal Word:	Danger						
	GHS Hazard Phrases:							
	H301: Toxic if swallowed.							
	H311: Toxic in contact with	skin.						
	H315: Causes skin irritation	n.						
	H319: Causes serious eye	irritation.						
	GHS Precaution Phrases	:						
	P264: Wash {hands} thoroughly after handling.							
	P280: Wear {protective gloves/protective clothing/eye protection/face protection}.							
	GHS Response Phrases:							
		ED: Immediately call a POISON CENTER or doctor. ash with plenty of soap and water.	/physician.					
		S: Rinse cautiously with water for several minutes.	Remove contact lenses, if present and easy					
	to do. Continue rinsing.							
		ITER or doctor/physician if you feel unwell.						
	P330: Rinse mouth.							
	P332+313: If skin irritation	occurs, get medical advice/attention.						



P337+313: If eye irritation persists, get medical advice/attention. P361+364: Take off immediately all contaminated clothing and wash it before reuse. P362+364: Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

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

2.3 Adverse Human Health Causes skin irritation.

Effects and Symptoms:Causes serious eye irritation.
Material may be irritating to the mucous membranes and upper respiratory tract.
May be harmful by inhalation.
May cause eye, skin, or respiratory system irritation.
Toxic if swallowed.
Toxic in contact with skin.

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

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
69-78-3 DG9650000	DTNB	1.0 -5.0 %	200-714-4 NA	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336
1866-15-5 FZ9865000	Acetylthiocholine iodide	1.0 -5.0 %	217-474-1 NA	Acute Tox.(D) 3: H311 Acute Tox.(O) 3: H301 Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336
7647-14-5 VZ4725000	Sodium chloride	5.0 -10.0 %	231-598-3 NA	No data available.
7758-11-4 TC5580000	Potassium phosphate, dibasic	45.0 -55.0 %	231-834-5 NA	No data available.
7778-77-0 TC6615500	Potassium phosphate, Monobasic	25.0 -48.0 %	231-913-4 NA	No data available.

Section 4. First Aid Measures

4.1	Description of First Aid Measures:	No data available.
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 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 15 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.
4.2	Important Symptoms and	Ingestion of large amounts can cause abdominal pain, lowered blood pressure, nausea, and
	Effects, Both Acute and	vomiting.
	Delayed:	



Revision: 03/18/2015 Supersedes Revision: 01/09/2015

		Section !	Fire Fighting I	Measures			
5.1 Su	itable Extinguishing	Use alcohol-resista	ant foam, carbon dioxide,	water, or dry chemical spray.			
Ме	dia: Use water spray to cool fire-exposed containers.						
	suitable Extinguishing	A solid water strea	am may be inefficient.				
	dia:						
	mmable Properties and	No data available.					
	zards: Ish Pt:	No data.					
	plosive Limits:	LEL: No data.		No data.			
	toignition Pt:	No data.	UEL. I	NO Udid.			
	-		r self-contained breathing	apparatus pressure-demanc			
5.5		-	-	ent contact with skin and eyes			
		Section 6. A	Accidental Releas	se Measures			
	otective Precautions,	•	breathing dust, and provid	•			
				oved self-contained breathing			
	ergency Procedures:			r boots, safety goggles, and h	ieavy rubber gloves).		
	vironmental ecautions:	Take steps to avo	id release into the enviror	nment, if safe to do so.			
		Contain spill and (collect as annronriate				
		Is and Material For Contain spill and collect, as appropriate.					
Up:							
•			7	01			
			7. Handling and				
		-	ust/fume/gas/mist/vapours	s/spray.			
	Handling:		r repeated exposure.				
	ecautions To Be Taken Storing:		ntly closed. ce with information listed c	on the product insert			
	her Precautions:	Protect from light.					
	Sect	ion 8. Expos	sure Controls/Pe	rsonal Protection			
8.1 Exp	oosure Parameters:						
CAS # Partial Chemical Nam		Name	Britain EH40	France VL	Europe		
69-78-3	3 DTNB		No data.	No data.	No data.		
1866-15	-5 Acetylthiocholine i	odide	No data.	No data.	No data.		
7647-14	-5 Sodium chloride		No data.	No data.	No data.		
7758-11	-4 Potassium phosph	iate, dibasic	No data.	No data.	No data.		
7778-77	-0 Potassium phosph	ate, Monobasic	No data.	No data.	No data.		
CAS #	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits		
69-78-3	3 DTNB		No data.	No data.	No data.		
1866-15	-5 Acetylthiocholine i	odide	No data.	No data.	No data.		
7647-14	-5 Sodium chloride		No data.	No data.	No data.		
	A Determine where h		No data.	No data.	Nia data		
7758-11	-4 Potassium phosph	nate, dibasic	No data.	NO Gala.	No data.		



Revision: 03/18/2015 Supersedes Revision: 01/09/2015

	HEMICAL	Supersedes Revision: 01/09/2015
8.2	Exposure Controls:	
8.2.1	Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne
	(Ventilation etc.):	levels below recommended exposure limits.
8.2.2	Personal protection equ	ipment:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothin	g:Lab coat
	Respiratory Equipment	NIOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintena	n Do not take internally.
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety
		shower.
		Wash thoroughly after handling.
		No data available.
	C	Section 9. Physical and Chemical Properties
<u> </u>		· · ·
9.1	-	vsical 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.
	Explosive Limits:	LEL: No data. UEL: No data.
	Vapor Pressure (vs. Air o	or mm No data.
	Hg):	
	Vapor Density (vs. Air =	1): No data.
	Specific Gravity (Water =	= 1): No data.
	Solubility in Water:	No data.
	Autoignition Pt:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
		Section 10. Stability and Reactivity
		Section 10. Stability and Reactivity
10.1	Reactivity:	No data available.
10.2	Stability:	Unstable [] Stable [X]
10.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.
	Polymerization:	Will occur [] Will not occur [X]
10.4	Conditions To Avoid:	No data available.
10.5	Incompatibility - Materia	
	To Avoid:	strong oxidizing agents
10.6	Hazardous	carbon dioxide
	Decomposition Or	carbon monoxide
	Byproducts:	hydrogen chloride gas
		hydrogen iodide
		nitrogen oxides
		phosphorus oxides
		potassium oxides
		Multi-region forma



Multi-region format

Revision: 03/18/2015 Supersedes Revision: 01/09/2015

			sodium oxides		Si	-		
			sulfur oxides					
			Section 11. Toxicological	Informa	ation			
11.1	Informa	tion on	The toxicological effects of this product ha			udied		
		ogical Effects:			r thoroughly of			
			Acetylthiocholine iodide - Toxicity Data: Oral LD50 (rat): 100 mg/kg; Skin LD50 (guinea pig): 500 mg/kg;					
			Potassium phosphate, monobasic - Toxic (rabbit): >4,640 mg/kg;	city Data: Ora	al LDLO (rat): 4	1,640 mg/kg; S	skin LD50	
		Toxicological	Only select Registry of Toxic Effects of C		stances (RTE	CS) data is pre	sented here	
	Effects:		See actual entry in RTECS for complete i					
			Acetylthiocholine iodide RTECS Number: Potassium phosphate, monobasic RTEC					
Carci	nogenicit	v:	NTP? No IARC Monographs? No		egulated? No			
CAS		- -	oonents (Chemical Name) NTP IARC ACGIH OSH/					
	-78-3	DTNB	· · · · · · · · · · · · · · · · · · ·	n.a.	n.a.	n.a.	n.a.	
186	6-15-5	Acetylthiocholine	e iodide	n.a.	n.a.	n.a.	n.a.	
764	7-14-5	Sodium chloride		n.a.	n.a.	n.a.	n.a.	
775	8-11-4	Potassium phos	phate, dibasic	n.a.	n.a.	n.a.	n.a.	
777	8-77-0	Potassium phos	phate, Monobasic	n.a.	n.a.	n.a.	n.a.	
		4	Section 12. Ecological I	nformati	ion	ł	-	
12.1 Toxicity:			Avoid release into the environment.					
			Runoff from fire control or dilution water r	nay cause po	ollution.			
12.2	Persiste	ence and	No data available.					
	Degrada	ability:						
12.3		Imulative	No data available.					
	Potentia							
12.4	Mobility		No data available.					
12.5 Results of PBT and vPvB			3 No data available.					
12.5	assessment:		No data available					
12.5 12.6		dverse effects:	No data available.					
		dverse effects:		neidarati	one			
	Other a		No data available. Section 13. Disposal Col Dispose in accordance with local, state, a					

Cayman

SAFETY DATA SHEET **Ellman's Reagent**

Page: 6 of 6

Supersedes Revision: 01/09/2015

				Capolog				
Section 14. Transport Information								
14.1 LAND T	RANSPORT (US	DOT):						
DOT Prope	DOT Proper Shipping Name: Not dangerous goods.							
DOT Hazar	d Class:							
UN/NA Nur	nber:							
14.1 LAND T	RANSPORT (Euro	opean ADR/RID):						
ADR/RID S	hipping Name:	Not dangerous goods.						
UN Numbe	r:							
Hazard Cla	ISS:							
14.3 AIR TR	ANSPORT (ICAO/	IATA):						
	Shipping Name:	Not dangerous goods.						
Additional Tra	nsport	Transport in accordance with lo	cal, state, and federa	al regulations.				
Information:								
		Section 15. Regul	atory Informa	tion				
EPA SARA (Sı	perfund Amendm	nents and Reauthorization Act of	of 1986) Lists					
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)			
69-78-3	DTNB		No	No	No			
1866-15-5	Acetylthiocholine	iodide	No	No	No			
7647-14-5	Sodium chloride		No	No	No			
7758-11-4	Potassium phosp	ohate, dibasic	No	No	No			
7778-77-0	Potassium phosp	ohate, Monobasic	No	No	No			
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists				
69-78-3	DTNB		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No					
1866-15-5	Acetylthiocholine	iodide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No					
7647-14-5	Sodium chloride		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -					
			Inventory; CA PROP.65: No					
7758-11-4	Potassium phosp	hate, dibasic	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No					
7778-77-0	Potassium phosp	hate, Monobasic	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No					
Regulatory Info Statement:	ormation	This SDS was prepared in acco No.1272/2008.	rdance with 29 CFR	1910.1200 and Reg	ulation (EC)			
		Section 16. Oth	er Informatio	n				
Revision Date:		03/18/2015						
Additional Info	rmation About	No data available.						
This Product:								
	ey or Disclaimer:	DISCLAIMER: This information currently available to us. Howev express or implied, with respect use. Users should make their o their particular purposes.	er, we make no warr to such information,	anty of merchantabil and we assume no I	ity or any other warranty, iability resulting from its			



according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008 Section 1. Identification of the Substance/Mixture and of the Company/Undertaking 1.1 Product Code: 400060 Product Name: EIA Buffer Concentrate (10X) 1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant identified uses: For research use only, not for human or veterinary use. 1.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency Contact: CHEMTREC Within USA and Canada: +1 Emergency Contact: CHEMTREC Outside USA and Canada: +1 Classification of the Substance or Mixture: Classification of the Substance or Mixture: Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Labellements: 2.1		man	EIA Builer Concentrate (I	Revision: 01/09/201
Section 1. Identification of the Substance/Mixture and of the Company/Undertaking 1.1 Product Code: 400060 Product Name: EIA Buffer Concentrate (10X) 1.2 Relevant Identified uses of the substance or mixture and uses advised against: Relevant Identified uses: For research use only, not for human or veterinary use. 1.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company ±1160 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company ±1160 FE. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company ±1 (734)971-3335 Emergency Contact: CHEMTREC Within USA and Canada: ±1 (703)627-3887 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 2.1 Classification of the Substance or Mi			parding to Regulation (EC) No. 1007/2006 as amonded by (EC)	Supersedes Revision: 04/02/2014
1.1 Product Code: 400060 Product Name: EIA Buffer Concentrate (10X) 1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant identified uses: For research use only, not for human or veterinary use. 1.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company (Cayman Chemical Company) *1 (734)971-3335 1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: *1 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.1 Label Elements: 2.2.1 Label Elements: 2.2.1 Label Elements: 2.2.1 Label Elements: 2.2.1 Label Insertify: Oral, Category 3 2.2 Label Elements: 2.2.1 Label Insmediately acut fandling.				
Product Name: EIA Buffer Concentrate (10X) 1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant identified uses: For research use only, not for human or veterinary use. 1.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company (1160 F. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company (1160 F. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company (11734)971-3335 1.4 Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 (2HEMTREC Outside USA and Canada: +1 (703)527-3887 2.1 Classification of the Substance or Mixture: . . . 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 . . 2.2 Label Elements: 2.1 Labelling according to Regulation (EC) No 1272/2008 [CLP]: 1 Danger . . <				company/ondenaking
Relevant identified uses: For research use only, not for human or veterinary use. 1.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: 2.1 Classification of the Substance or Mixture: 2.1 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 2.2 Label Elements: 2.3 2.3.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: V Offs Hazard Phrases: H301: Toxic if swallowed. GHS Response Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301:4310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. P330: Rinse mouth.	1.1			
1.3 Details of the Supplier of the Safety Data Sheet: I.3 Details of the Supplier of the Safety Data Sheet: Company Name: Cayman Chemical Company H180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: +1 (703)527-3887 Company Name: Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: Acute Toxicity: Oral, Category 3 2.2 Label Elements: Acute Toxicity: Oral, Category 3 2.2 Label Elements: Danger GHS Signal Word: Danger GHS Response Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. POISON CENTER or doctor/physician.	1.2	Relevant identified uses o	of the substance or mixture and uses advised again	st:
Company Name: Cayman Chemical Company 1180 E. Elisworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: 2.1 Emergency Contact: CHEMTREC Within USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.3 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.4 Kabel Elements: H301: Toxic if swallowed. GHS Response Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P30: Rinse mouth.		Relevant identified uses	For research use only, not for human or veterinar	y use.
1180 E. Ellsworth Rd. Ann Arbor, MI 48108 Web site address: www.caymanchem.com Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency telephone number: Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: GHS Signal Word: Danger GHS Hazard Phrases: Pade: H301: Toxici if swallowed. GHS Precaution Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. P300: Rinse mouth.	1.3	Details of the Supplier of t	the Safety Data Sheet:	
Information: Cayman Chemical Company +1 (734)971-3335 1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: GHS Signal Word: Danger GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.		Company Name:	1180 E. Ellsworth Rd.	
1.4 Emergency telephone number: Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.1.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Operation of the Substance or Mixture: 2.1.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Operation of the Substance or Mixture: 2.1.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Operation of the Substance or Mixture: Classification according to Regulation (EC) No 1272/2008 [CLP]: Operation of the Substance or Mixture: Classification according to Regulation (EC) No 1272/2008 [CLP]: Operation of the Substance or Mixture: Classification for the Substance or Mixture: Classification according to Regulation (EC) No 1272/2008 [CLP]: Operation for the Substance<		Web site address:	www.caymanchem.com	
Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300 CHEMTREC Outside USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Offs Signal Word: Danger GHS Signal Word: Danger GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P30: Rinse mouth.		Information:	Cayman Chemical Company	+1 (734)971-3335
CHEMTREC Outside USA and Canada: +1 (703)527-3887 Section 2. Hazards Identification 2.1 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: Offer Signal Word: Danger GHS Signal Word: Danger GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash (hands) thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.	1.4	Emergency telephone nur	mber:	
 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: GHS Signal Word: Danger GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. 		Emergency Contact:		
 2.1 Classification of the Substance or Mixture: 2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]: Acute Toxicity: Oral, Category 3 2.2 Label Elements: 2.2.1 Labeling according to Regulation (EC) No 1272/2008 [CLP]: GHS Signal Word: Danger GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. 			Section 2. Hazards Identificati	ion
 GHS Hazard Phrases: H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. 			guulon (20) no 1212/2000 [021].	
 H301: Toxic if swallowed. GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. 		GHS Signal Word:	Danger	
 GHS Precaution Phrases: P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth. 				
P264: Wash {hands} thoroughly after handling. GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.				
GHS Response Phrases: P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.				
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330: Rinse mouth.				
		P301+310: IF SWALLOWE		sician.
GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information.				



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

Revision: 01/09/2015 Supersedes Revision: 04/02/2014

2.3 **Adverse Human Health** Material may be irritating to the mucous membranes and upper respiratory tract. Effects and Symptoms:

May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation.

Toxic if swallowed.

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

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
7758-11-4 TC5580000	Potassium phosphate, dibasic	13.3 %	231-834-5 NA	No data available.
7778-77-0 TC6615500	Potassium phosphate, Monobasic	3.21 %	231-913-4 NA	No data available.
26628-22-8 VY8050000	Sodium azide	0.1 %	247-852-1 011-004-00-7	Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410
7647-14-5 √Z4725000	Sodium chloride	23.4 %	231-598-3 NA	No data available.
194491-31-1 NA	EDTA, tetrasodium salt, hydrate	0.38 %	NA NA	Acute Tox.(O) 4: H302 Eye Damage 1: H318
9048-46-8 MT6446000	Bovine Serum Albumin (BSA)	1.0 %	232-936-2 NA	Acute Tox.(O) 4: H302
7732-18-5 2C0110000	Water	58.61 %	231-791-2 NA	No data available.

Section 4. First Aid Measures

4.1	Description of First Aid	No data available.
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 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 15 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.
12	Important Symptoms and	Expedition may actual addeminal pain, congretion is internal organs, dehydration, diarrhad

4.2 Important Symptoms and Exposure may cause: abdominal pain, congestion in internal organs, dehydration, diarrhea, Effects, Both Acute and gastrointestinal disturbances, lowered blood pressure, nausea, and vomiting. **Delayed:**



SAFETY DATA SHEET

	1		S	SAFETY DATA	SHEET	Page: 3 of 7
e é	2		EIA]	Buffer Concent	rate (10X)	Revision: 01/09/2015
Lay	nen				Supers	edes Revision: 04/02/2014
			Section 5.	Fire Fighting I	Measures	
5.1	Suitable	Extinguishing	Use alcohol-resistan	t foam, carbon dioxide,	water, or dry chemical spray	·
	Media:		Use water spray to c	ool fire-exposed contai	ners.	
	Unsuita	ble Extinguishing	A solid water stream	may be inefficient.		
	Media:					
5.2	Flamma Hazards	-	d No data available.			
	Flash P	t:	No data.			
	Explosi	ve Limits:	LEL: No data.	UEL: I	No data.	
	Autoign	ition Pt:	No data.			
5.3	Fire Fig	hting Instructions	•	•	apparatus pressure-demand	
			Section 6. Ac	cidental Releas	se Measures	
6.1	Protecti	ve Precautions,	Avoid breathing vap	ors and provide adequa	ate ventilation.	
	Protecti	ve Equipment and	As conditions warra	nt, wear a NIOSH appro	oved self-contained breathing	apparatus, or respirator,
	Emerge	ncy Procedures:	and appropriate pers	sonal protection (rubbe	r boots, safety goggles, and I	neavy rubber gloves).
6.2	Environ		Take steps to avoid	release into the enviror	nment, if safe to do so.	
	Precaut					
6.3			Contain spill and col		dianagal in apportance with l	and regulations
	Up:	ment and Cleanin	g transfer to a chemic	car waste container for (disposal in accordance with le	ocal regulations.
	op.					
			Section 7	. Handling and	Storage	
7.1	Precaut	ions To Be Taken	Avoid breathing dust	/fume/gas/mist/vapours	/spray.	
	in Hand	-	Avoid prolonged or re			
7.2			Keep container tight			
	in Storiı	ng:	Store in accordance	with information listed o	on the product insert.	
		Sec	tion 8. Exposu	ure Controls/Pe	rsonal Protection	
8.1	Exposur	e Parameters:				
CAS #	1	Partial Chemical	Name	Britain EH40	France VL	Europe
7758	3-11-4	Potassium phospl	nate, dibasic	No data.	No data.	No data.
7778	3-77-0	Potassium phospl	nate, Monobasic	No data.	No data.	No data.
2662	8-22-8	Sodium azide		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
7647	7-14-5	Sodium chloride		No data.	No data.	No data.
19449	91-31-1	EDTA, tetrasodiur	n salt, hydrate	No data.	No data.	No data.
9048	3-46-8	Bovine Serum Alb	umin (BSA)	No data.	No data.	No data.
7732	2-18-5	Water		No data.	No data.	No data.
CAS #	1	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits
7758	3-11-4	Potassium phospl	nate, dibasic	No data.	No data.	No data.
7778	3-77-0	Potassium phospl	nate, Monobasic	No data.	No data.	No data.
2662	8-22-8	Sodium azide		No data.	CEIL: 0.29 mg/m3	No data.
7647	7-14-5	Sodium chloride		No data.	No data.	No data.
19449	91-31-1	EDTA, tetrasodiur	n salt, hydrate	No data.	No data.	No data.



Revision: 01/09/2015 upersedes Revision: 04/02/2014

	man	I		l		rsedes Revision: 04/02/2014		
9048-46-8 Bovine Serum Alk		Bovine Serum Alt	bumin (BSA)	No data.	No data.	No data.		
	2-18-5	Water		No data.	No data.	No data.		
3.2	-	re Controls:						
8.2.1	-	ering Controls	•	ires, local exhaust ventilatio	n, or other engineering	controls to control airbor		
	-	ation etc.):		nended exposure limits.				
8.2.2		al protection equi	-					
	-	otection:	Safety glasses					
		ive Gloves:	Compatible chemica	I-resistant gloves				
		Protective Clothing	-					
	-	atory Equipment	NIOSH approved res	pirator, as conditions warra	nt.			
		у Туре):	. De vest teles internell					
	ce Prac		Do not take internally	/. tilizing this material should I	a aquipped with an ev	wash facility and a safet		
	ce Prac	tices:	shower.		be equipped with an ey	ewash lacinty and a sale		
			Wash thoroughly after	er handling.				
			No data available.	5				
		S		sical and Chemica	l Properties			
9.1	Informa		sical and Chemical P					
-		al States:		X]Liquid []Solid				
	-	ance and Odor:	A clear, color					
	pH: 7.0							
	Melting	Point:	No data.					
	Boiling Point: No data.							
	Flash P	Pt:	No data.					
	Evapor	ation Rate:	No data.					
	Explosi	ive Limits:	LEL: No data	a. UEI	.: No data.			
	Vapor Pressure (vs. Air or mm No data.							
	Hg):							
	-	Density (vs. Air = ′	-					
	•	c Gravity (Water =	•					
	Solubil	ity in Water:	No data.					
	Autoig	nition Pt:	No data.					
9.2	Other In	nformation						
	Percen	t Volatile:	No data.					
			Section 10	. Stability and Rea	activity			
10.1	Reactiv	/ity:	No data available.					
10.2	Stabilit	y:		able [X]				
10.3	Stabilit	y Note(s):	Stable if stored in ac	cordance with information lis	sted on the product ins	sert.		
	Polyme	erization:	Will occur [] W	ill not occur [X]				
10.4	Conditi	ions To Avoid:	No data available.					
10.5	-	-	s strong oxidizing ager	nts				
	To Avo							
10.6	Hazard		hydrogen chloride ga	as				
		position Or	potassium oxides					
	Byprod	lucts:	sodium oxides					
						Multi-rogion for		
						Multi-region for		



Revision: 01/09/2015 Supersedes Revision: 04/02/2014

CHEMICAL					S	upersedes Revis	sion: 04/02/2014
		Section	on 11. Toxicologica	al Informa	ation		
I1.1 Informa Toxicol	ition on ogical Effects:	The toxicol	ogical effects of this compou	nd have not b	een thoroughl	y studied.	
		Potassium phosphate, Monobasic - Toxicity Data: Skin LD50 (rabbit): >4,640 mg/kg; Sodium chloride - Toxicity Data: Oral LD50 (rat): 3,000 mg/kg; Oral LD50 (mouse): 4,000 mg/kg; Sodium chloride - Irritation Data: Eyes (rabbit): 100 mg (24h) moderate; Skin (rabbit): 500 mg (24h)					
	c Toxicological	-	Registry of Toxic Effects of entry in RTECS for complete		-	CS) data is pre	esented here.
Effects:		Potassium	phosphate, Monobasic RTE oride RTECS Number: VZ47	CS Number: T			
Carcinogenicit	y:	NTP? No	IARC Monographs? No		egulated? No		
CAS #	Hazardous Cor	mponents (C	hemical Name)	NTP	IARC	ACGIH	OSHA
7758-11-4	Potassium phos	sphate, dibasi		n.a.	n.a.	n.a.	n.a.
7778-77-0	Potassium phos	sphate, Monot	basic	n.a.	n.a.	n.a.	n.a.
26628-22-8	Sodium azide			n.a.	n.a.	A4	n.a.
7647-14-5	Sodium chloride	÷		n.a.	n.a.	n.a.	n.a.
194491-31-1	EDTA, tetrasodi	ium salt, hydra	ate	n.a.	n.a.	n.a.	n.a.
9048-46-8	Bovine Serum A	Albumin (BSA)	1	n.a.	n.a.	n.a.	n.a.
7732-18-5	Water			n.a.	n.a.	n.a.	n.a.
Potentia 2.4 Mobility	umulative al: / in Soil: of PBT and vPvI	No data av No data av B No data av	ailable.				
		Secti	on 13. Disposal Co	onsiderat	tions		
3.1 Waste I	Disposal Method:		accordance with local, state,				
		Sec	ction 14. Transport	Informat	tion		
14.1 LAND	TRANSPORT (US		· ·				
DOT Prope DOT Hazar UN/NA Nu		e: Not da	ngerous goods.				
14.1 LAND	TRANSPORT (Eu	ropean ADR/	RID):				
ADR/RID S UN Numbe Hazard Cla		Not da	ngerous goods.				



14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

Not dangerous goods.

Additional Transport Information:

Section 15. Regulatory Information

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

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

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7758-11-4	Potassium phosphate, dibasic	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
7778-77-0 Potassium phosphate, Monobasic CAA HAP,ODC: No; CWA NPDES: No; Inventory; CA PROP.65: No		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
26628-22-8	Sodium azide	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
7647-14-5	Sodium chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
194491-31-1	EDTA, tetrasodium salt, hydrate	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
9048-46-8	Bovine Serum Albumin (BSA)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No
7732-18-5	Water	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No

Regulatory Information Statement:

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

Section 16. Other Information					
Revision Date:	01/09/2015				
Additional Information About	No data available.				
This Product:					
Company Policy or Disclaimer:	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.				

Page: 6 of 7



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

		acc	cording to Regulation (EC) No. 190)7/2006 as amended b	oy (EC) No. 1272/200	08	
		Section 1.	Identification of the Substar	nce/Mixture and of	the Company/U	ndertaking	
1.1	Product Code: 400062 Product Name: Wash Buffer Concentrate (400X)						
1.2	Relevant identified uses of the substance or mixture and uses advised against:						
	Releva	ant identified uses	: For research use only, n	ot for human or vete	erinary use.		
1.3	Details	of the Supplier of	the Safety Data Sheet:				
	Comp	any Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	bany			
		ite address:	www.caymanchem.com				
	Inform		Cayman Chemical Comp	bany	+1 (73	4)971-3335	
1.4	Emerge	ncy telephone nur	mber:				
	Emerg	ency Contact:	CHEMTREC Within USA CHEMTREC Outside US		•	0)424-9300 3)527-3887	
			Section 2. Ha	zards Identifi	cation		
2.2 2.2.1 2.3	Labelin GHS Sig GHS Ha Based o GHS Pr No phra GHS Ra OHS St Please Advers	gnal Word: azard Phrases: on evaluation of cur recaution Phrases ases apply. esponse Phrases: ases apply. orage and Dispos refer to Section 7 fo e Human Health and Symptoms:	al Phrases: or Storage and Section 13 for I Material may be irritating to t May be harmful by inhalatior May cause eye, skin, or resp To the best of our knowledge	Disposal information he mucous membra i, ingestion, or skin a iratory system irritat e, the toxicological p	i. ines and upper res absorption. tion. iroperties have no	spiratory tract. t been thoroughly investigated.	
		1	tion 3. Composition	1		1	
CAS RTE(Hazardous Comp REACH Registra	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification	
	8-11-4 80000	Potassium phosphat	te, dibasic	53.0 %	231-834-5 NA	No data available.	
	8-77-0 15500	Potassium phosphat	te, Monobasic	12.9 %	231-913-4 NA	No data available.	
	2-18-5 10000	Water		34.1 %	231-791-2 NA	No data available.	



4.1

4.2

5.1

5.2

5.3

6.1

6.2

6.3

7.1

7.2

SAFETY DATA SHEET Wash Buffer Concentrate (400X)

Revision: 01/09/2015 Supersedes Revision: 12/09/2013

4	HEMICAL	Supersedes Revision: 12/09/2013
		Section 4. First Aid Measures
	Description of First Aid	No data available.
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 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 15 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.
	Important Symptoms and	I Ingestion of large amounts can cause abdominal pain, lowered blood pressure, nausea, and
	Effects, Both Acute and	vomiting.
	Delayed:	
		Section 5. Fire Fighting Measures
	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
	Media:	Use water spray to cool fire-exposed containers.
	Unsuitable Extinguishing	A solid water stream may be inefficient.
	Media:	
	Flammable Properties an	dNo data available.
	Hazards:	
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
	Fire Fighting Instructions	: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or
		equivalent), and full protective gear to prevent contact with skin and eyes.
		Section 6. Accidental Release Measures
	Protective Precautions,	Avoid breathing vapors and provide adequate ventilation.
	Protective Equipment and	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
	Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
	Environmental	Take steps to avoid release into the environment, if safe to do so.
	Precautions:	
		r Contain spill and collect, as appropriate.
		gTransfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
	Precautions To Be Taken	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
	Precautions To Be Taken	Keep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

.1	Exposure Parameters:						
CAS	# Partial Chemica	al Name	Britain EH40	France VL	Europe		
775	8-11-4 Potassium phos	phate, dibasic	No data.	No data.	No data.		
777	8-77-0 Potassium phos	phate, Monobasic	No data.	No data.	No data.		
773	2-18-5 Water		No data.	No data.	No data.		
CAS	# Partial Chemica	al Name	OSHA TWA	ACGIH TWA	Other Limits		
775	8-11-4 Potassium phos	phate, dibasic	No data.	No data.	No data.		
777	8-77-0 Potassium phos	Potassium phosphate, Monobasic		No data.	No data.		
773	2-18-5 Water		No data.	No data.	No data.		
8.2	Exposure Controls:			ł	ł		
8.2.1	Engineering Controls	Use process enc	losures, local exhaust ven	tilation, or other engineering co	ontrols to control airbo		
	(Ventilation etc.):	levels below reco	els below recommended exposure limits.				
3.2.2	Personal protection equ	ipment:					
	Eye Protection:	Safety glasses					
	Protective Gloves:	Compatible chen	nical-resistant gloves				
	Other Protective Clothir	ig:Lab coat	-				
	Respiratory Equipment	-	respirator, as conditions	warrant.			
	(Specify Type):						
	Work/Hygienic/Maintena	an Do not take inter	nallv.				
	ce Practices:		-	ould be equipped with an eyev	vash facility and a sat		
		shower.					
		Wash thoroughly	horoughly after handling.				
		No data available	Э.				
		Section 9 Pl	nysical and Chen	nical Properties			
9.1	Information on Basic Ph		•				
5.1	Physical States:	[] Gas	[X] Liquid [] Solio	Ч			
	Appearance and Odor:		A clear, colorless solution				
	pH:	7.4					
	Melting Point:	No data.					
	Boiling Point:	No data.					
	Flash Pt:		No data.				
	Evaporation Rate:	No data.					
	Explosive Limits:						
	Vapor Pressure (vs. Air		LEL: No data. UEL: No data. No data.				
	Hg):						
	Vapor Density (vs. Air =	1): No data.					
		-					
	Specific Gravity (Water	No data					
	Solubility in Water: Autoignition Pt:	No data. No data.					



Revision: 01/09/2015 Supersedes Revision: 12/09/2013

9.2	Other Info	ormation						
	Percent	Volatile:	No d	ata.				
			Secti	on 10. Stability and	Reactiv	rity		
10.1	Reactivit	y:	No data ava	ilable.				
10.2	Stability	:	Unstable [] Stable [X]					
10.3 Stability Note(s):		Stable if stored in accordance with information listed on the product insert.						
Polymerization:		Will occur [] Will not occur [X]						
10.4 Conditions To Avoid:		ns To Avoid:	No data available.					
10.5 Incompatibility - Material		s strong oxidizing agents						
	To Avoid	l:						
10.6	Hazardo	us	phosphorus					
	Decomp	osition Or	potassium o	xides				
-	Byprodu	cts:						
			Sectio	n 11. Toxicological	Informa	tion		
11.1	Informat		The toxicolo	gical effects of this product ha	ive not been	thoroughly st	udied.	
		gical Effects:						
Carcir	nogenicity		NTP? No	IARC Monographs? No	OSHA Reg	gulated? No		
CAS	#	Hazardous Com	ponents (Ch	emical Name)	NTP	IARC	ACGIH	OSHA
775	8-11-4	Potassium phosp	hate, dibasic		n.a.	n.a.	n.a.	n.a.
777	8-77-0	Potassium phosp	hate, Monoba	asic	n.a.	n.a.	n.a.	n.a.
773	2-18-5	Water			n.a.	n.a.	n.a.	n.a.
			Secti	on 12. Ecological li	nformatio	on		
12.1	Toxicity:		Avoid releas	e into the environment.				
			Runoff from	fire control or dilution water m	ay cause po	llution.		
12.2	Persiste	nce and	No data ava	ilable.				
	Degrada	bility:						
12.3	Bioaccu	mulative	No data ava	ilable.				
	Potentia	l:						
12.4	Mobility	in Soil:	No data ava	ilable.				
12.5	Results	of PBT and vPvB	No data ava	ilable.				
	assessm	ent:						
			Sectio	on 13. Disposal Cor	sideratio	ons		
13.1	Waste Di	isposal Method:	Dispose in a	ccordance with local, state, a	nd federal re	gulations.		



Revision: 01/09/2015

aynan				Supersec	des Revision: 12/09/2013
		Section 14. Trans	sport Informa	tion	
14.1 LAND T	RANSPORT (US	DOT):			
DOT Prope DOT Hazar UN/NA Nur		Not dangerous goods.			
14.1 LAND T	RANSPORT (Eur	opean ADR/RID):			
ADR/RID S UN Numbe Hazard Cla		Not dangerous goods.			
14.3 AIR TR/	ANSPORT (ICAO/	IATA):			
ICAO/IATA	Shipping Name:	Not dangerous goods.			
Additional Trai	nsport	Transport in accordance with loo	cal, state, and federa	al regulations.	
		Section 15. Regul	atory Informa	ition	
EPA SARA (Su	perfund Amendn	nents and Reauthorization Act of	of 1986) Lists		
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7758-11-4	Potassium phosp	hate, dibasic	No	No	No
7778-77-0	Potassium phosp	hate, Monobasic	No	No	No
7732-18-5	Water		No	No	No
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists	
7758-11-4	Potassium phosp	hate, dibasic	CAA HAP,ODC: N Inventory; CA PR	lo; CWA NPDES: No OP.65: No	; TSCA: Yes -
7778-77-0	Potassium phosp	hate, Monobasic	CAA HAP,ODC: N Inventory; CA PR	lo; CWA NPDES: No OP.65: No	; TSCA: Yes -
7732-18-5	Water		CAA HAP,ODC: N Inventory; CA PR	lo; CWA NPDES: No OP.65: No	; TSCA: Yes -
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.			
		Section 16. Oth	er Informatio	n	
Revision Date:		01/09/2015			
Additional Info	rmation About	No data available.			
This Product:					
Company Polic	y or Disclaimer:	DISCLAIMER: This information is currently available to us. However express or implied, with respect use. Users should make their on their particular purposes.	er, we make no warı to such information,	anty of merchantabilit and we assume no lia	ty or any other warranty, ability resulting from its



SAFETY DATA SHEET Cortisol Express AChE Tracer

Revision: 04/04/2015

	CHEMICAL		Supersedes Revision: 12/06/20
	accor	ding to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008
	Section 1. Id	entification of the Substance/Mixture and of th	e Company/Undertaking
.1	Product Code: Product Name:	400370 Cortisol Express AChE Tracer	
.2	Relevant identified uses of	the substance or mixture and uses advised aga	ainst:
	Relevant identified uses:	For research use only, not for human or vetering	ary use.
.3	Details of the Supplier of th	e Safety Data Sheet:	
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	
	Web site address:	www.caymanchem.com	
	Information:	Cayman Chemical Company	+1 (734)971-3335
.4	Emergency telephone numb	per:	
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887
		Section 2. Hazards Identifica	ation
2.2 2.2.1	Label Elements: Labeling according to Regi	ulation (EC) No 1272/2008 [CLP]:	
	GHS Signal Word:		



Revision: 04/04/2015 Supersedes Revision: 12/06/2011

2.3	Adverse Human Health	Causes mild skin irritation.
	Effects and Symptoms:	Harmful if swallowed.
		Material may be irritating to the mucous membranes and upper respiratory tract.
		May be harmful by inhalation or skin absorption.
		May cause eye or respiratory system irritation.

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

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	Cortisol Express AChE Tracer	99.99 %	NA NA	Acute Tox.(O) 4: H302 Skin Corr. 3: H316
26628-22-8 VY8050000	Sodium azide	0.01 %	247-852-1 011-004-00-7	Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410

Section 4. First Aid Measures

4.1	Description of First Aid	No data available.
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 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 15 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.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
 Media: Use water spray to cool fire-exposed containers.
 Unsuitable Extinguishing A solid water stream may be inefficient.
 Media:

5.2 Flammable Properties and No data available.

Hazards:

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

Autoignition Pt: No data.

5.3 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.

UEL: No data.



P E 2 E P 3.3 M C U 7.1 P 7.2 P	Protecti Emerge Environ Precaut Method: Contain Up: Precaut in Hand	ncy Procedures: mental ions: s and Material Fo ment and Cleani ions To Be Take	nd As conditions warran and appropriate pers Take steps to avoid r or Contain spill and coll ingTransfer to a chemic Section 7.	sonal protection (rubber bo release into the environme lect, as appropriate.	ed self-contained breathing a bots, safety goggles, and hea ent, if safe to do so. posal in accordance with loca	avy rubber gloves).		
E .2 E P .3 M C U .1 P .1 .1 .2 P	Emerge Environ Precaut Method: Contain Up: Precaut Precaut	ncy Procedures: mental ions: s and Material Fo ment and Cleani ions To Be Take	and appropriate pers Take steps to avoid r or Contain spill and coll ingTransfer to a chemic Section 7.	sonal protection (rubber bo release into the environme lect, as appropriate. cal waste container for disp	oots, safety goggles, and hea ent, if safe to do so. posal in accordance with loca	avy rubber gloves).		
2 E P .3 M C U 7.1 P ii 7.2 P	Environ Precaut Method Contain Up: Precaut n Hand Precaut	mental ions: s and Material Fo ment and Cleani ions To Be Take	Take steps to avoid r or Contain spill and coll ingTransfer to a chemic Section 7.	release into the environme lect, as appropriate. al waste container for disp	ent, if safe to do so. posal in accordance with loca			
P .3 M .0 U .1 P .1 .1 .2 P	Precaut Methods Contain Up: Precaut Precaut	ions: s and Material Fo ment and Cleani ions To Be Take	or Contain spill and coll ngTransfer to a chemic Section 7.	lect, as appropriate. al waste container for disp	posal in accordance with loca	al regulations.		
3 M C U 7.1 P ii 7.2 P	Methods Contain Up: Precaut In Hand Precaut	s and Material Fo ment and Cleani ions To Be Take	ngTransfer to a chemic Section 7.	al waste container for disp		al regulations.		
C U 7.1 P in 7.2 P	Contain Up: Precaut In Hand Precaut	ment and Cleani ions To Be Take	ngTransfer to a chemic Section 7.	al waste container for disp		al regulations.		
.1 P ii 7.2 P	Up: Precaut In Hand Precaut	ions To Be Take	Section 7.			al regulations.		
7.1 P ir 7.2 P	Precaut In Hand Precaut			Handling and S				
iı 7.2 P	in Hand Precaut			Handling and S	Storage			
iı 7.2 P	in Hand Precaut		n Avoid breathing dust/		noruge			
'.2 P	Precaut	lina:	-	/fume/gas/mist/vapours/sp	oray.			
		-	Avoid prolonged or re					
ir	n Stariu		n Keep container tightly					
	II Storii	ng:	Store in accordance v	with information listed on t	the product insert.			
		Sec	tion 8. Exposu	ire Controls/Pers	onal Protection			
.1 E	Exposur	e Parameters:						
CAS #		Partial Chemica	I Name	Britain EH40	France VL	Europe		
N	IA	Cortisol Express	AChE Tracer	No data.	No data.	No data.		
26628-	-22-8	Sodium azide		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		
CAS #		Partial Chemica	I Name	OSHA TWA		Other Limits		
N	IA	Cortisol Express	AChE Tracer	No data.	No data.	No data.		
26628-	-22-8	Sodium azide		No data.	CEIL: 0.29 mg/m3	No data.		
3.2 E	Exposur	e Controls:		4	I	ł		
3.2.1 E	Enginee	ering Controls	Use process enclosu	res, local exhaust ventilati	ion, or other engineering cor	ntrols to control airbor		
(Ventila	tion etc.):	levels below recomm	ended exposure limits.				
3.2.2 F	Persona	al protection equ	ipment:					
E	Eye Pro	tection:	Safety glasses					
P	Protecti	ve Gloves:	Compatible chemical	-resistant gloves				
C	Other P	rotective Clothin	g:Lab coat					
R	Respira	tory Equipment	NIOSH approved resp	pirator, as conditions warr	rant.			
-		· Туре):						
v	-	•	n Do not take internally					
	ce Pract	tices:		ilizing this material should	d be equipped with an eyewa	ash facility and a safe		
			shower.					
			Wash thoroughly afte	rhondling				



Revision: 04/04/2015 Supersedes Revision: 12/06/2011

			ion 9. Physical a		ical PI	operties		
.1		-	and Chemical Properties					
	-	I States:	[]Gas []Liquid	[X] Solid				
		ance and Odor:	A lyophilized powder					
	pH:		7.4					
	Melting		No data.					
	Boiling		No data.					
	Flash Pt		No data.					
	-	tion Rate:	No data.					
	Explosive Limits:		LEL: No data.		UEL: No	data.		
	-	ressure (vs. Air or mn	n No data.					
	Hg):							
	=	ensity (vs. Air = 1):	No data.					
	-	Gravity (Water = 1):	No data.					
		ty in Water:	No data.					
	Autoign	ition Pt:	No data.					
9.2	Other Inf	formation						
	Percent	Volatile:	No data.					
			Section 10. Stab	ility and F	Reactiv	vity		
10.1	Reactivi	ity: No	data available.	-		-		
10.2	Stability	-	stable [] Stable [X]					
0.3	-		ble if stored in accordance	with information	on listed o	on the product	insert.	
	Polyme	rization: Will	occur [] Will not occ	ur [X]				
10.4	Conditio	ons To Avoid: No	data available.					
10.5		atibility - Materials stro	ng oxidizing agents					
	To Avoi	-	3					
0.6	Hazardo		rogen chloride gas					
		-	sphorus oxides					
	Byprodu	-	sium oxides					
	_)p.ea		ium oxides					
			Section 11. Toxic	ological Ir	oforma	ation		
11.1	Informa		e toxicological effects of this				udied	
		ogical Effects:		- p				
CAS	#	Hazardous Compone	ents (Chemical Name)		NTP	IARC	ACGIH	OSHA
	NA	Cortisol Express ACh	E Tracer	I	n.a.	n.a.	n.a.	n.a.
266'	28-22-8	Sodium azide			n.a.	n.a.	A4	n.a.

Multi-region format



Revision: 04/04/2015 Supersedes Revision: 12/06/2011

		Section 12. Ecol	ogical Informa		
12.1 Toxici	ty:	Avoid release into the environr	<u> </u>		
		Runoff from fire control or dilut	ion water may cause	pollution.	
12.2 Persis	stence and	No data available.			
Degra	dability:				
12.3 Bioac	cumulative	No data available.			
Poten					
	ty in Soil:	No data available.			
	ts of PBT and vPvB sment:	No data available.			
12.6 Other	adverse effects:	No data available.			
		Section 13. Dispo	sal Considera	itions	
13.1 Waste	Disposal Method:	Dispose in accordance with loc	cal, state, and federal	regulations.	
		Section 14. Trar	nsport Informa	ation	
14.1 LAND	TRANSPORT (US	DOT):			
DOT Pro	per Shipping Name	Not dangerous goods.			
	ard Class:				
UN/NA N					
	TRANSPORT (Eur				
	Shipping Name:	Not dangerous goods.			
UN Numl Hazard C					
	RANSPORT (ICAO/	ΙΔΤΔ).			
	A Shipping Name:	Not dangerous goods.			
Additional T		Transport in accordance with I	ocal, state, and feder	al regulations.	
Information:	-				
		Section 15. Regu	latory Informa	ation	
EPA SARA (Superfund Amendm	nents and Reauthorization Act	-		
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	Cortisol Express	AChE Tracer	No	No	No
26628-22-8	Sodium azide		Yes 500 LB	Yes 1000 LB	Yes
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists	
NA	Cortisol Express	AChE Tracer	CAA HAP,ODC: PROP.65: No	No; CWA NPDES: N	io; TSCA: No; CA
26628-22-8	Sodium azide		CAA HAP,ODC: Inventory; CA PI	No; CWA NPDES: N ROP.65: No	io; TSCA: Yes -

Multi-region format



Revision: 04/04/2015

Cayman	Supersedes Revision: 12/06/2011
Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
	Section 16. Other Information
Revision Date:	04/04/2015
Additional Information About	No data available.
This Product:	
Company Policy or Disclaimer:	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.



SAFETY DATA SHEET

Cortisol Express EIA Monoclonal Antibody

P .2 R	Section 1. I Product Code: Product Name: Relevant identified uses of	ording to Regulation (EC) No. 1907/2006 as amended by (E dentification of the Substance/Mixture and of the	,
P .2 R	Product Code: Product Name: Relevant identified uses of		Company/Lindertakind
P 2 R	Product Name: Relevant identified uses of		e company/ondertaking
		400372 Cortisol Express EIA Monoclonal Antibody	
		the substance or mixture and uses advised again	inst:
3 D	Relevant identified uses:	For research use only, not for human or veterina	ary use.
	Details of the Supplier of the Supplier of the second second second second second second second second second s	he Safety Data Sheet:	
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	
	Web site address:	www.caymanchem.com	
	Information:	Cayman Chemical Company	+1 (734)971-3335
4 E	Emergency telephone num	iber:	
	Emergency Contact:	CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:	+1 (800)424-9300 +1 (703)527-3887
		Section 2. Hazards Identifica	tion
2 1	Skin Corrosion/Irritation, abel Flements:	, Category 3	
	abel Elements:	, Category 3 gulation (EC) No 1272/2008 [CLP]:	
2.1 L	Label Elements: Labeling according to Reg	gulation (EC) No 1272/2008 [CLP]:	
2.1 L	abel Elements:		
2.1 L	Label Elements: Labeling according to Reg	gulation (EC) No 1272/2008 [CLP]: Warning	
2.1 L	Label Elements: Labeling according to Reg Control of the second state of the second st	gulation (EC) No 1272/2008 [CLP]: Warning d.	
2.1 L	Label Elements: Labeling according to Reg OFF Signal Word: GHS Hazard Phrases: H302: Harmful if swallower H316: Causes mild skin irr GHS Precaution Phrases	gulation (EC) No 1272/2008 [CLP]: Warning d. itation.	
2.1 L	Label Elements: Labeling according to Reg Control Control Cont	gulation (EC) No 1272/2008 [CLP]: Warning d. itation. :: ughly after handling.	
2.1 L	Label Elements: Labeling according to Reg GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallower H316: Causes mild skin irr GHS Precaution Phrases P264: Wash {hands} thoro GHS Response Phrases:	gulation (EC) No 1272/2008 [CLP]: Warning d. itation.	
2.1 L	Label Elements: Labeling according to Reg GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallower H316: Causes mild skin irr GHS Precaution Phrases P264: Wash {hands} thoro GHS Response Phrases: P301+312: IF SWALLOWE P330: Rinse mouth.	gulation (EC) No 1272/2008 [CLP]: Warning d. itation. :: ughly after handling. ED: Call a POISON CENTER or doctor/physician if y	ou feel unwell.
2.1 L	Label Elements: Labeling according to Reg GHS Signal Word: GHS Hazard Phrases: H302: Harmful if swallower H316: Causes mild skin irr GHS Precaution Phrases P264: Wash {hands} thoro GHS Response Phrases: P301+312: IF SWALLOWE P330: Rinse mouth.	gulation (EC) No 1272/2008 [CLP]: Warning d. itation. :: ughly after handling. ED: Call a POISON CENTER or doctor/physician if y occurs, get medical advice/attention.	rou feel unwell.



SAFETY DATA SHEET **Cortisol Express EIA Monoclonal Antibody**

Revision: 04/04/2015 Supersedes Revision: 12/06/2011

2.3	Adverse Human Health	Causes mild skin irritation.
	Effects and Symptoms:	Harmful if swallowed.
		Material may be irritating to the mucous membranes and upper respiratory tract.
		May be harmful by inhalation or skin absorption.
		May cause eye or respiratory system irritation.

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

Section 3. Composition/Information on Ingredients

CAS # / RTECS #	Hazardous Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	Cortisol Express EIA Monoclonal Antibody	99.99 %	NA NA	Acute Tox.(O) 4: H302 Skin Corr. 3: H316
26628-22-8 VY8050000	Sodium azide	0.01 %	247-852-1 011-004-00-7	Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410

Section 4. First Aid Measures

4.1	Description of First Aid	No data available.
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 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 15 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.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers. Media: Unsuitable Extinguishing A solid water stream may be inefficient. Media:

5.2 Flammable Properties and No data available.

Hazards:

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

No data. **Autoignition Pt:**

5.3 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.

UEL: No data.



SAFETY DATA SHEET

Cortisol Express EIA Monoclonal Antibody

Revision: 04/04/2015 Supersedes Revision: 12/06/2011

			Section 6. Ac	cidental Release	Measures	
6.1	Protecti	ve Precautions,	Avoid raising and bre	eathing dust, and provide	adequate ventilation.	
	Protecti	ve Equipment an			ed self-contained breathing a	
	Emerge	ncy Procedures:	and appropriate pers	sonal protection (rubber b	oots, safety goggles, and hea	avy rubber gloves).
6.2	Environ	mental	Take steps to avoid	release into the environm	ent, if safe to do so.	
	Precaut	ions:				
6.3			r Contain spill and coll			
		ment and Cleanir	g Transfer to a chemic	al waste container for dis	posal in accordance with loc	al regulations.
	Up:					
			Section 7.	Handling and S	Storage	
7.1	Precaut	ions To Be Taken	Avoid breathing dust/	/fume/gas/mist/vapours/sp	oray.	
	in Hand	ling:	Avoid prolonged or re	epeated exposure.		
7.2	Precaut	ions To Be Taken	Keep container tightly	y closed.		
	in Stori	ng:	Store in accordance	with information listed on	the product insert.	
		Sec	tion 8. Exposu	ire Controls/Pers	onal Protection	
3.1	Exposur	e Parameters:				
CAS #	#	Partial Chemical	Name	Britain EH40	France VL	Europe
	NA	Cortisol Express	EIA Monoclonal	No data.	No data.	No data.
2662	28-22-8	Sodium azide		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
CAS #	#	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits
					No data.	Ne dete
	NA	Cortisol Express	EIA Monoclonal	No data.	No data.	No data.
	NA 28-22-8		EIA Monoclonal	No data. No data.	CEIL: 0.29 mg/m3	No data.
	28-22-8	Antibody	EIA Monoclonal			
2662	28-22-8 Exposu	Antibody Sodium azide	Use process enclosu	No data. res, local exhaust ventilat		No data.
2662 3.2	28-22-8 Exposur Enginee	Antibody Sodium azide e Controls:	Use process enclosu	No data.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila	Antibody Sodium azide e Controls: ering Controls	Use process enclosu levels below recomm pment:	No data. res, local exhaust ventilat	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro	Antibody Sodium azide e Controls: ering Controls tion etc.): al protection equi tection:	Use process enclosu levels below recomm pment: Safety glasses	No data. res, local exhaust ventilat rended exposure limits.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti	Antibody Sodium azide er Controls: ering Controls tion etc.): al protection equi tection: ve Gloves:	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical	No data. res, local exhaust ventilat rended exposure limits.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P	Antibody Sodium azide e Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat	No data. rres, local exhaust ventilat rended exposure limits.	CEIL: 0.29 mg/m3	No data.
2662 3.2	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P Respira	Antibody Sodium azide e Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing tory Equipment	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat	No data. res, local exhaust ventilat rended exposure limits.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P Respira (Specify	Antibody Sodium azide e Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing tory Equipment r Type):	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res	No data. rres, local exhaust ventilat rended exposure limits. -resistant gloves pirator, as conditions war	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P Respira (Specify Work/H	Antibody Sodium azide re Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing tory Equipment r Type): ygienic/Maintenar	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res	No data. Ires, local exhaust ventilat nended exposure limits. I-resistant gloves pirator, as conditions war /.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P Respira (Specify	Antibody Sodium azide re Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing tory Equipment r Type): ygienic/Maintenar	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res n Do not take internally Facilities storing or ut	No data. Ires, local exhaust ventilat nended exposure limits. I-resistant gloves pirator, as conditions war /.	CEIL: 0.29 mg/m3	No data.
2662 3.2 3.2.1	28-22-8 Exposur Enginee (Ventila Persona Eye Pro Protecti Other P Respira (Specify Work/H	Antibody Sodium azide re Controls: ering Controls tion etc.): al protection equi tection: ve Gloves: rotective Clothing tory Equipment r Type): ygienic/Maintenar	Use process enclosu levels below recomm pment: Safety glasses Compatible chemical g:Lab coat NIOSH approved res	No data. res, local exhaust ventilat rended exposure limits. -resistant gloves pirator, as conditions war /. tilizing this material should	CEIL: 0.29 mg/m3	No data.

Multi-region format



SAFETY DATA SHEET **Cortisol Express EIA Monoclonal Antibody**

		S	ection 9.	Physical a	nd Cher	nical P	roperties				
9.1	Informati	on on Basic Phys	sical and Chem	nical Properties	5						
	Physical	States:	[] Gas	s [] Liquid	[X] Soli	id					
	Appeara	nce and Odor:	A lyoph	nilized powder							
	Melting	Point:	No data.								
	Boiling I	Point:	No data. No data.								
	Flash Pt	:									
	Evapora	tion Rate:	No data.								
	Explosiv	e Limits:	LEL: No data. UEL: No data.								
	Vapor P	ressure (vs. Air o	r mm No data.								
	Hg):										
	Vapor Density (vs. Air = 1 Specific Gravity (Water = Solubility in Water:		-								
	Autoigni	tion Pt:	No data	a.							
9.2	Other Inf	ormation									
	Percent	Volatile:	No data	а.							
			Section	n 10. Stab	ility and	Reacti	vity				
0.1	Reactivi	ty:	No data availa	ble.							
0.2	Stability	:	Unstable []	Stable [X]							
10.3	Stability	Note(s):	Stable if stored	d in accordance	accordance with information listed on the product insert.						
	Polymer	ization:	Will occur []	Will not occ	ur [X]						
10.4	Conditio	ons To Avoid:	No data availa	ble.							
10.5	Incompa	tibility - Materials	strong oxidizin	g agents							
	To Avoid	d:									
10.6	Hazardo	us	hydrogen chloride gas								
	Decomp	osition Or	phosphorus ox	kides							
	Byprodu	icts:	potassium oxic	des							
			sodium oxides								
			Section	11. Toxico	ological	Informa	ation				
11.1	Informat		The toxicologic	cal effects of this	s product ha	ve not beei	n thoroughly st	udied.			
		ogical Effects:		、							
CAS		Hazardous Com				NTP		ACGIH	OSHA		
2661	NA 28-22-8	Cortisol Express		Anubody		n.a. n.a.	n.a.	n.a. A4	n.a.		
2002	20-22-0		0								
0.4	Taulali			n 12. Ecol		normat	ion				
2.1	Toxicity	:		into the environi e control or dilut		av cauco a	ollution				
		.				ay cause p					
2.2	Persiste		No data availa	DIE.							
	Degrada	-	No. J. C. T.	L 1-							
2.3	Bioaccu		No data availa	ble.							
	Potentia			bla							
12.4	Mobility		No data availa								
12.5	Results	of PBT and vPvB	INO data availa	DIÊ.							
								N	lulti-region form		



SAFETY DATA SHEET Cortisol Express EIA Monoclonal Antibody

Page: 5 of 5

assessment:								
12.6 Other ad	verse effects:	No data available.						
		Section 13. Dispos	al Considerat	ions				
13.1 Waste D	isposal Method:	Dispose in accordance with local	l, state, and federal re	egulations.				
		Section 14. Trans	sport Informat	ion				
14.1 LAND T	RANSPORT (US I	DOT):	-					
DOT Prope	r Shipping Name:	Not dangerous goods.						
DOT Hazaro	d Class:							
UN/NA Nun								
	RANSPORT (Euro							
UN Number	hipping Name:	Not dangerous goods.						
Hazard Clas								
	ANSPORT (ICAO/I	IATA):						
	Shipping Name:	Not dangerous goods.						
Additional Trar		Transport in accordance with loc	cal, state, and federal	regulations.				
Information:								
		Section 15. Regula	atory Informat	ion				
EPA SARA (Su	perfund Amendm	nents and Reauthorization Act o	of 1986) Lists					
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)			
NA	Cortisol Express	EIA Monoclonal Antibody	No	No	No			
26628-22-8	Sodium azide		Yes 500 LB	Yes 1000 LB	Yes			
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or S	State Lists				
NA	Cortisol Express	EIA Monoclonal Antibody	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No					
26628-22-8	Sodium azide		CAA HAP,ODC: No Inventory; CA PRO	o; CWA NPDES: No; DP.65: No	TSCA: Yes -			
Regulatory Info	rmation	This SDS was prepared in accor	dance with 29 CFR 1	910.1200 and Regul	ation (EC)			
Statement:		No.1272/2008.						
		Section 16. Oth	er Informatior	า				
Revision Date:		04/04/2015						
Additional Infor	mation About	No data available.						
This Product:								
Company Polic	y or Disclaimer:	DISCLAIMER: This information i		-				
		currently available to us. Howeve express or implied, with respect		-				
		use. Users should make their ov						
		their particular purposes.	Ũ					



P .2 R .3 D	Section 1. I Product Code: Product Name:	,,	ne Company/Undertaking					
P .2 R .3 D	Section 1. I Product Code: Product Name: Relevant identified uses o Relevant identified uses: Details of the Supplier of t	dentification of the Substance/Mixture and of th 400374 Cortisol Express EIA Standard f the substance or mixture and uses advised aga For research use only, not for human or veterin	ne Company/Undertaking					
P .2 R .3 D	Product Code: Product Name: Relevant identified uses o Relevant identified uses: Details of the Supplier of t	400374 Cortisol Express EIA Standard f the substance or mixture and uses advised aga For research use only, not for human or veterin	ainst:					
P .2 R .3 D	Product Name: Relevant identified uses o Relevant identified uses: Details of the Supplier of t	Cortisol Express EIA Standard f the substance or mixture and uses advised aga For research use only, not for human or veterin						
.3 D	Relevant identified uses: Details of the Supplier of t	f the substance or mixture and uses advised aga For research use only, not for human or veterin						
.3 D	Relevant identified uses: Details of the Supplier of t	For research use only, not for human or veterin						
		·						
	Company Name:							
	company rumo.	Cayman Chemical Company						
		1180 E. Ellsworth Rd.						
		Ann Arbor, MI 48108						
	Web site address:	www.caymanchem.com						
	Information:	Cayman Chemical Company	+1 (734)971-3335					
.4 E	Emergency telephone nun	ıber:						
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300					
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887					
		Section 2. Hazards Identifica	ation					
.1 C	Classification of the Subs							
		o Regulation (EC) No 1272/2008 [CLP]:						
	Flammable Liquids, Cate							
.2 L	abel Elements:	.901 y 2						
		gulation (EC) No 1272/2008 [CLP]:						
•	GHS Signal Word: Danger							
	GHS Signal Word:	Danger						
	GHS Signal Word: GHS Hazard Phrases:	Danger						
	•	-						
	GHS Hazard Phrases:	quid and vapor.						
	GHS Hazard Phrases: H225: Highly flammable lie GHS Precaution Phrases P210: Keep away from {he	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking.						
	GHS Hazard Phrases: H225: Highly flammable lin GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gla	quid and vapor. 5: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protectio						
	GHS Hazard Phrases: H225: Highly flammable lin GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gla GHS Response Phrases	quid and vapor. 5: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protectio	on}.					
	GHS Hazard Phrases: H225: Highly flammable line GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gle GHS Response Phrases P303+361+353: IF ON Ske	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protection : KIN (or hair): Remove/take off immediately all contar	on}.					
	GHS Hazard Phrases: H225: Highly flammable line GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gle GHS Response Phrases P303+361+353: IF ON Ske water/shower. GHS Storage and Dispose	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protection : KIN (or hair): Remove/take off immediately all contar	on}. minated clothing. Rinse skin with					
	GHS Hazard Phrases: H225: Highly flammable line GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gle GHS Response Phrases P303+361+353: IF ON Ske water/shower. GHS Storage and Dispose	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protectio : (IN (or hair): Remove/take off immediately all contar sal Phrases:	on}. minated clothing. Rinse skin with					
3 A	GHS Hazard Phrases: H225: Highly flammable lie GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective gle GHS Response Phrases P303+361+353: IF ON Sk water/shower. GHS Storage and Dispose Please refer to Section 7 f	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protectio : (IN (or hair): Remove/take off immediately all contar sal Phrases: or Storage and Section 13 for Disposal information.	on}. minated clothing. Rinse skin with es and upper respiratory tract.					
3 A	GHS Hazard Phrases: H225: Highly flammable line GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases P303+361+353: IF ON Sk water/shower. GHS Storage and Dispos Please refer to Section 7 f Adverse Human Health	quid and vapor. s: eat/sparks/open flames/hot surfaces} No smoking. oves/protective clothing/eye protection/face protection : KIN (or hair): Remove/take off immediately all contar sal Phrases: or Storage and Section 13 for Disposal information. Material may be irritating to the mucous membrane	on}. minated clothing. Rinse skin with es and upper respiratory tract. sorption.					



		Sec	tion 3. Composition	/information	on ingredie	กเร			
CAS # RTEC		Hazardous Com REACH Registra	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification			
50-2 GM892	23-7 25000	Cortisol		< 0.01 %	200-020-1 NA	Toxic Repro. 2: H361 STOT (RE) 2: H373			
64-′ KQ630	17-5 00000	Ethyl alcohol		>99.9 %	200-578-6 603-002-00-5	Flam. Liq. 2: H225			
		·		·	·	•			
			Section 4. Fi	rst Aid Meas	ures				
4.1	Descrip	otion of First Aid	No data available.						
1	Measur	es:							
	In Case	of Inhalation:	Remove to fresh air. If not bre	eathing, give artificia	al respiration or give	ve oxygen by trained personnel.			
			Get immediate medical attent						
	In Case	of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminate						
			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 15 minutes. Have eyes examined and tested by medical personnel.						
	In Case	of Ingestion:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined						
			and tested by medical persor	nnel.					
4.2			May cause anemia, cough, C						
		, Both Acute and	d (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects.						
	Delaye	d:							
			Section 5. Fire	Fighting Me	asures				
5.1	Suitabl	e Extinguishing	Use alcohol-resistant foam, o	carbon dioxide, wate	er, or dry chemical	spray.			
	Media:		Use water spray to cool fire-e	exposed containers.					
	Unsuita Media:	able Extinguishing	A solid water stream may be	inefficient.					
5.2	Flamma	able Properties an	dCan release vapors that form	explosive mixtures	at temperatures a	at or above the flashpoint.			
	Hazard	-	Container explosion may occ	-	-	ľ			
			Emits toxic fumes under fire	conditions.					
			Sensitive to static discharge.						
			Vanara and traval to a second		h back				
			vapors can travel to a source	e of ignition and flas					
	Flash P	Pt:	14.00 C Method Used: Cl	0					
		et: ive Limits:	•	osed Cup					
	Explos		14.00 C Method Used: Cl	osed Cup					
5.3	Explosi Autoigi	ive Limits: nition Pt:	14.00 C Method Used: Cl LEL: 3.3% at 25.0 C	osed Cup UEL: 19.0% ained breathing app e gear to prevent co	5 at 25.0 C paratus pressure-d				
5.3	Explosi Autoigi	ive Limits: nition Pt:	14.00 C Method Used: Cl LEL: 3.3% at 25.0 C 363.00 C a: As in any fire, wear self-conta equivalent), and full protectiv	osed Cup UEL: 19.0% ained breathing app e gear to prevent co	5 at 25.0 C paratus pressure-d				



-									
			Section 6. Ac	cidental Release Me	easures				
6.1	Protect	ive Precautions,	Avoid breathing vapo	ors and provide adequate venti	lation.				
	Protect	ive Equipment an	d As conditions warran	it, wear a NIOSH approved sel	f-contained breathing appa	ratus, or respirator			
		ency Procedures:		onal protection (rubber boots,					
5.2	Enviror	-		elease into the environment, if		C ,			
	Precaut								
6.3			r Contain spill and coll	ect as appropriate					
			-	al waste container for disposal	in accordance with local re	equilations			
	Up:					gulationol			
	θр.								
			Section 7.	Handling and Stor	age				
7.1	Precaut	ions To Be Take	n Avoid breathing dust/fume/gas/mist/vapours/spray.						
	in Handling:		Avoid prolonged or repeated exposure. Keep away from sources of ignition.						
				neasures against static dischar	ge.				
7.2			Neep away from heat	· •					
	in Stori	ng:	Keep container tightly	v closed. with information listed on the product insert.					
	Other P	recautions:	Hygroscopic.						
		Sec	tion 8. Exposu	re Controls/Persona	al Protection				
8.1	Exposu	re Parameters:							
CAS	#	Partial Chemica	l Name	Britain EH40	France VL	Europe			
50)-23-7	Cortisol		No data.	No data.	No data.			
64	1 -17-5	Ethyl alcohol		TWA: 1920 mg/m3 (1000 ppm)	TWA: 1900 mg/m3 (1000	No data.			
				STEL: ()	ppm)				
					STEL: 9500 mg/m3 (5000 ppm)				
CAS	#	Partial Chemica	l Name	OSHA TWA		Other Limits			
	")-23-7	Cortisol		No data.	No data.	No data.			
	4-17-5	Ethyl alcohol		PEL: 1000 ppm	TLV: 1000 ppm	No data.			
3.2		re Controls:				No data.			
	•			real least exhaust ventilation of	or other ongineering control	a to control airbarn			
3.2.1	-	ering Controls		res, local exhaust ventilation, c	or other engineering control	s to control airborn			
	•	tion etc.):		ended exposure limits.					
3.2.2		al protection equ	-						
	•	otection:	Safety glasses						
		ive Gloves:	Compatible chemical	-resistant gloves					
		rotective Clothin							
	-	tory Equipment	NIOSH approved res	pirator, as conditions warrant.					
		у Туре):							
	Work/H	ygienic/Maintena	n Do not take internally						
	ce Prac	tices:		ilizing this material should be e	equipped with an eyewash	facility and a safety			
			shower.						
			Wash thoroughly afte	r handling.					
			No data available.						
						Multi-region for			



SAFETY DATA SHEET **Cortisol Express EIA Standard**

		Supersedes Revision: 06/09/2010					
	5	Section 9. Physical and Chemical Properties					
9.1	Information on Basic Phy	vsical and Chemical Properties					
	Physical States:	[]Gas [X]Liquid []Solid					
	Appearance and Odor:	Solution					
	Melting Point:	No data. No data.					
	Boiling Point:						
	Flash Pt:	14.00 C Method Used: Closed Cup					
	Evaporation Rate:	No data.					
	Explosive Limits:	LEL: 3.3% at 25.0 C UEL: 19.0% at 25.0 C					
	Vapor Pressure (vs. Air	or mm 43 MM_HG at 20.0 C					
	Hg):						
	Vapor Density (vs. Air =	1): No data.					
	Specific Gravity (Water	= 1): No data.					
	Solubility in Water:	No data.					
	Autoignition Pt:	363.00 C					
9.2	Other Information						
J.2	Percent Volatile:	No data.					
	Fercent volatile.	NU Uata.					
		Section 10. Stability and Reactivity					
10.1	Reactivity:	No data available.					
10.2	Stability:	Unstable [] Stable [X]					
10.3	Stability Note(s):	Stable if stored in accordance with information listed on the product insert.					
	Polymerization:	Will occur [] Will not occur [X]					
10.4	Conditions To Avoid:	heat, flames and sparks					
10.5	Incompatibility - Materia	Is alkali metals					
	To Avoid:	ammonia					
		roxides					
		ig oxidizing agents					
10.6	Hazardous	carbon dioxide					
	Decomposition Or	carbon monoxide					
	Byproducts:						
		Section 11 Toxicological Information					
		Section 11. Toxicological Information					
11.1	Information on	The toxicological effects of this product have not been thoroughly studied.					
	Toxicological Effects:	Cortisol- Toxicity Data: Oral TDLO (man): 400 mg/kg/10D (intermittent); Intraperitoneal LD50 (rat)					
		150 mg/kg;					
		Ethanol - Toxicity Data: Oral TDLO (man): 1.14 ml/kg; Oral TDLO (man): 650 mg/kg; Oral LD50					
		(rat): 7,060 mg/kg; Oral LD50 (mouse): 3,450 mg/kg; Oral LD50 (mouse): 10.5 ml/kg; Oral LD50					
		(rabbit): 6,300 mg/kg; Inhalation LC50 (rat): 20,000 ppm (10h); Inhalation TCLO (human): 1,800					
		ppm (30m); Inhalation TCLO (human): 2,500 mg/m3 (20m); Inhalation LC50 (rat): 5,900 mg/m3 (6b); Inhalation LCLO (mause): 20 200 ppm (7b);					
		(6h); Inhalation LCLO (mouse): 29,300 ppm (7h); Ethopol Urritotion Date: Even (rabbit): 500 mg (24h) mild: Skin (rabbit): 20 mg (24h) moderate:					
		Ethanol - Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin (rabbit): 20 mg (24h) moderate;					
	Chronic Toxicological	Cortisol - Investigated as mutagen and reproductive effector.					
	Effects:	Ethanol - Investigated as a mutagen, reproductive effector, and tumorigen.					
		Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.					
		Cortisol RTECS Number: GM8925000					
		Ethanol RTECS Number: KQ6300000					
		Multi-region form					



	ŧ	Hazardous Com	onents (Chemical	Name)	NTP	IARC	ACGIH	OSHA
50-	-23-7	Cortisol			n.a.	n.a.	n.a.	n.a.
64-	-17-5	Ethyl alcohol			n.a.	1	A4	n.a.
		•	Section 1	2. Ecolog	ical Informati	on	•	
2.1	Toxicity		Avoid release into	the environme	nt.			
			Runoff from fire co	ntrol or dilution	water may cause po	ollution.		
12.2	Persiste		No data available.					
	Degrada	-						
12.3		mulative	No data available.					
	Potentia		NI 1 7 111					
12.4 Mobility in Soil: 12.5 Results of PBT and vPvE		No data available.						
12.5			INO data available.					
12.6	assessn Other ac	hent: Iverse effects:	No data available.					
12.0	other ac	iverse enects:						
			Section 13	3. Disposa	al Considerati	ons		
13.1	Waste D	isposal Method:	Dispose in accorda	ince with local,	state, and federal re	egulations.		
13.1								
13.1			Section	14. Trans	port Informat	ion		
		RANSPORT (US I		14. Trans	port Informati	ion		
14.1	LAND T	RANSPORT (US I	OT):		port Informati	on		
14.1 D(LAND T	r Shipping Name:				on		
14.1 D(D(LAND T OT Prope	r Shipping Name: d Class:	OT): Ethyl alcohol s	olution			11	
14.1 DC UN	LAND T OT Prope OT Hazar N/NA Nun	r Shipping Name: d Class: nber:	POT): Ethyl alcohol s 3 1170	olution	e liquid		II	
14.1 DC UN	LAND T OT Prope OT Hazar N/NA Nun	r Shipping Name: d Class: nber: RANSPORT (Euro	POT): Ethyl alcohol s 3 1170	olution FLAMMABLI	e liquid		II	
14.1 DC UN 14.1 AI	LAND T OT Prope OT Hazar N/NA Nun LAND T DR/RID S	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name:	POT): Ethyl alcohol s 3 1170 FEIRMARTE LOUID 3 pean ADR/RID): Ethyl alcohol s	olution FLAMMABLI	E LIQUID Packing Grou	p:		
14.1 DC UN 14.1 AI	LAND T OT Prope OT Hazar N/NA Nun LAND T DR/RID Si N Numbe	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r:	POT): Ethyl alcohol s 3 1170 FERMAREE LOUR 3 pean ADR/RID): Ethyl alcohol s 1170	olution FLAMMABLI olution	e liquid	p:	11	
14.1 DC UN 14.1 AI UN Ha	LAND T OT Prope OT Hazar N/NA Num LAND T DR/RID S N Number azard Cla	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss:	POT): Ethyl alcohol s 3 1170 FIEMMEDIE LOUD 3 Pean ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI	olution FLAMMABLI olution	E LIQUID Packing Grou	p:		
14.1 DC UN 14.1 AI UN Ha 14.3	LAND T OT Prope OT Hazar N/NA Num LAND T DR/RID Si N Number azard Cla AIR TR/	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I	POT): Ethyl alcohol s 3 1170 Freen ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA):	olution FLAMMABLI olution LE LIQUID	E LIQUID Packing Grou	p:		
14.1 DC UN 14.1 AI UN Ha 14.3 IC	LAND T OT Prope OT Hazar N/NA Num LAND T DR/RID S N Number azard Cla AIR TR/	r Shipping Name: d Class: nber: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name:	POT): Ethyl alcohol s 3 1170 FIEMMEDIE LOUD 3 Pean ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA): Ethyl alcohol s	olution FLAMMABLI olution LE LIQUID	E LIQUID Packing Grou Packing Grou	p: p:	11	
14.1 DC UN 14.1 AI Ha 14.3 IC UN	LAND T OT Prope OT Hazar N/NA Num LAND T DR/RID Si N Number azard Cla AIR TR/	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name: r:	POT): Ethyl alcohol s 3 1170 Freen ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA):	olution FLAMMABLI olution LE LIQUID olution	E LIQUID Packing Grou	p: p: p:		
14.1 DC UN 14.1 AI UN Ha 14.3 IC UN Ha	LAND T OT Prope OT Hazard N/NA Num LAND T DR/RID S N Number azard Cla AIR TRA AO/IATA N Number azard Cla	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name: r: ss:	POT): Ethyl alcohol s 3 1170 FIEMMEDIE LOUD 3 Pean ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA): Ethyl alcohol s 1170 3 - FLAMMABI	olution FLAMMABLI olution LE LIQUID olution LE LIQUID	E LIQUID Packing Grou Packing Grou Packing Grou IATA Classific	p: p: p: :ation:	11	
14.1 DC UN 14.1 AI 14.3 IC UN Ha Additi	LAND T OT Prope OT Hazar N/NA Num LAND T DR/RID Si N Number azard Cla AIR TRA AO/IATA N Number	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name: r: ss:	POT): Ethyl alcohol s 3 1170 pean ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA): Ethyl alcohol s 1170 3 - FLAMMABI Transport in accord When sold in quan	olution FLAMMABLI olution LE LIQUID olution LE LIQUID dance with loca tities of less th	E LIQUID Packing Grou Packing Grou Packing Grou IATA Classific al, state, and federal an or equal to 1 mL,	p: p: sation: regulations. or 1 g, with a	II II 3 n Excepted Qu	-
14.1 DC UN 14.1 AI Ha 14.3 IC UN Ha Additi	LAND T OT Prope OT Hazard N/NA Num LAND T DR/RID Si N Number azard Cla AIR TRA AO/IATA N Number azard Cla ional Trar	r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name: r: ss:	POT): Ethyl alcohol s 3 1170 pean ADR/RID): Ethyl alcohol s 1170 3 - FLAMMABI ATA): Ethyl alcohol s 1170 3 - FLAMMABI Transport in accord When sold in quan E1, E2, E4, or E5,	olution FLAMMABLI olution LE LIQUID olution LE LIQUID dance with loca tities of less th this item meet	E LIQUID Packing Grou Packing Grou Packing Grou IATA Classific al, state, and federal	p: p: sation: regulations. or 1 g, with an antities exemp	II II 3 n Excepted Qu ption, per IATA	2.6.10.



			ation			
zardous Com	nents and Reauthorization Act	of 1986) Lists				
	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
ortisol		No	No	No		
nyl alcohol		No	No	No		
zardous Com	ponents (Chemical Name)	Other US EPA or	State Lists			
rtisol		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No				
iyl alcohol				No; TSCA: Yes -		
ation	This SDS was prepared in acc No.1272/2008.	cordance with 29 CFR 1910.1200 and Regulation (EC)				
	Section 16. Ot	her Informatio	on			
tion About						
	their particular purposes.					
	azardous Com ortisol hyl alcohol ation tion About r Disclaimer:	hyl alcohol This SDS was prepared in acc No.1272/2008. Section 16. Ot 04/04/2015 No data available. r Disclaimer: DISCLAIMER: This informatior currently available to us. Howe express or implied, with respect	ortisol CAA HAP,ODC: Inventory; CA PI hyl alcohol CAA HAP,ODC: Inventory; CA PI ation This SDS was prepared in accordance with 29 CFF No.1272/2008. Section 16. Other Information 04/04/2015 No data available. r Disclaimer: DISCLAIMER: This information is believed to be ac currently available to us. However, we make no wat express or implied, with respect to such information use. Users should make their own investigations to	cortisol CAA HAP,ODC: No; CWA NPDES: Inventory; CA PROP.65: No hyl alcohol CAA HAP,ODC: No; CWA NPDES: Inventory; CA PROP.65: No ation This SDS was prepared in accordance with 29 CFR 1910.1200 and Re No.1272/2008. Section 16. Other Information 04/04/2015 No data available. r Disclaimer: DISCLAIMER: This information is believed to be accurate and represe currently available to us. However, we make no warranty of merchanta express or implied, with respect to such information, and we assume n use. Users should make their own investigations to determine the suit		