

SAFETY DATA SHEET Polysorbate 20

Revision: 12/03/2016 Supersedes Revision: 08/01/2016

		entification of the Substance/Mixture and o					
.1	Product Code:	400035					
	Product Name:	Polysorbate 20					
	Synonyms:	Tween 20™;					
.2	Relevant identified uses of t	he substance or mixture and uses advised	against:				
	Relevant identified uses:	For research use only, not for human or ve	0				
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 (73	4)971-3335			
1.4	Emergency telephone numb	er:					
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (80	0)424-9300			
			· ·				
		CHEMTREC Outside USA and Canada:	+1 (70	3)527-3887			
> 1	Classification of the Substa	Section 2. Hazards Identi					
2.1 2.2	Classification of the Substan Label Elements:	Section 2. Hazards Identi					
	Label Elements:	Section 2. Hazards Identiance or Mixture:					
	Label Elements: GHS Signal Word:	Section 2. Hazards Identi					
	Label Elements: GHS Signal Word: GHS Hazard Phrases:	Section 2. Hazards Identi nce or Mixture: None	fication	3)527-3887			
	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre	Section 2. Hazards Identiance or Mixture:	fication	3)527-3887			
	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases:	Section 2. Hazards Identi nce or Mixture: None	fication	3)527-3887			
	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply.	Section 2. Hazards Identi nce or Mixture: None	fication	3)527-3887			
	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases:	Section 2. Hazards Identi nce or Mixture: None	fication	3)527-3887			
	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply.	Section 2. Hazards Identiance or Mixture: None ently available data this substance or mixture	fication	3)527-3887			
	 Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curred GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa 	Section 2. Hazards Identi nce or Mixture: None ently available data this substance or mixture	fication	3)527-3887			
2.2	 Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curred GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for 	Section 2. Hazards Identiance or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat	fication is not classifiable ad	3)527-3887			
	 Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curred GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health Maging 	Section 2. Hazards Identia ince or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informate faterial may be irritating to the mucous memb	fication is not classifiable ad	3)527-3887			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health	Section 2. Hazards Identia nce or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat faterial may be irritating to the mucous memb fay be harmful by inhalation, ingestion, or skir	fication is not classifiable ac ion. ranes and upper res	3)527-3887			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health M Effects and Symptoms: M	Section 2. Hazards Identia ince or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat Material may be irritating to the mucous memb May be harmful by inhalation, ingestion, or skir May cause eye, skin, or respiratory system irrit	fication is not classifiable ad ion. ranes and upper res absorption. ation.	3)527-3887			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health M Effects and Symptoms: M M T	Section 2. Hazards Identiance or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat Material may be irritating to the mucous memb May be harmful by inhalation, ingestion, or skir May cause eye, skin, or respiratory system irrit to the best of our knowledge, the toxicological	fication is not classifiable ad ion. ranes and upper res absorption. ation. properties have not	3)527-3887 ccording to GHS.			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curre GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health M Effects and Symptoms: M M T Sectio	Section 2. Hazards Identif ince or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat faterial may be irritating to the mucous memb fay be harmful by inhalation, ingestion, or skir fay cause eye, skin, or respiratory system irrit to the best of our knowledge, the toxicological on 3. Composition/Information	fication is not classifiable ad ion. ranes and upper res absorption. ation. properties have not on Ingredie	3)527-3887 coording to GHS. spiratory tract. t been thoroughly investigate nts			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of currer GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health M Effects and Symptoms: M M T Section # / Hazardous Compored	Section 2. Hazards Identif ince or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal informat Material may be irritating to the mucous memb May be harmful by inhalation, ingestion, or skir May cause eye, skin, or respiratory system irrit to the best of our knowledge, the toxicological on 3. Composition/Information ments (Chemical Name)/ Concentration	fication is not classifiable ad ion. ranes and upper res absorption. ation. properties have not	3)527-3887 ccording to GHS.			
2.2 2.3 CAS RTEC 9003	Label Elements: GHS Signal Word: GHS Hazard Phrases: Based on evaluation of curred GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposa Please refer to Section 7 for Adverse Human Health M Effects and Symptoms: M T Section # / Hazardous Compor REACH Registration	Section 2. Hazards Identif Ince or Mixture: None ently available data this substance or mixture I Phrases: Storage and Section 13 for Disposal information Material may be irritating to the mucous membility be harmful by inhalation, ingestion, or skir May cause eye, skin, or respiratory system irrit To the best of our knowledge, the toxicological In 3. Composition/Information In Monolaurate (polysorbate 100.0 %	fication is not classifiable ad ion. ranes and upper res absorption. ation. properties have not non Ingredie EC No./	3)527-3887 coording to GHS. spiratory tract. t been thoroughly investigate nts			



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		Section 4. First Aid Measures
4.1	Description of First Aid	
	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.
		A solid water stream may be inefficient.
	Media:	
5.2	Flammable Properties an	dNo data available.
	Hazards:	No data available.
	Flash Pt:	No data available.
		LEL: No data. UEL: No data.
	Explosive Limits: Autoignition Pt:	No data.
5.2	-	: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or
5.3	Fire Fighting instructions	equivalent), and full protective gear to prevent contact with skin and eyes.
		Section 6. Accidental Release Measures
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
	Protective Equipment an Emergency Procedures:	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanir	ngTransfer 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.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	



Autoignition Pt:

Other Information

Percent Volatile:

Viscosity:

9.2

Decomposition Temperature:

Molecular Formula & Weight:

No data.

No data. No data.

N.A.

C58H114O26

1227.5

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	HEMICAL	Supersedes Revision: 08/01/2016
8.2	Exposure Controls:	
8.2.1	• •	Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborn
	(Ventilation etc.):	evels below recommended exposure limits.
8.2.2	Personal protection equipn	nent:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothing:L	_ab 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 safety
	s	shower.
	V	Nash thoroughly after handling.
	١	No data available.
	Se	ction 9. Physical and Chemical Properties
9.1	Information on Basic Physic	cal and Chemical Properties
	Physical States:	[]Gas [X]Liquid []Solid
	Physical States: Appearance and Odor:	[]Gas [X] Liquid [] Solid A viscous liquid
	-	
	Appearance and Odor:	A viscous liquid
	Appearance and Odor: pH:	A viscous liquid No data.
	Appearance and Odor: pH: Melting Point:	A viscous liquid No data. No data.
	Appearance and Odor: pH: Melting Point: Boiling Point:	A viscous liquid No data. No data. No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt:	A viscous liquid No data. No data. No data. No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate:	A viscous liquid No data. No data. No data. No data. No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas):	A viscous liquid No data. No data. No data. No data. No data. No data. No data. LEL: No data. UEL: No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits:	A viscous liquid No data. No data. No data. No data. No data. No data. No data. LEL: No data. UEL: No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits: Vapor Pressure (vs. Air or n	A viscous liquid No data. No data. No data. No data. No data. No data. No data. No data. LEL: No data. UEL: No data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits: Vapor Pressure (vs. Air or n Hg):	A viscous liquid No data. No data. No data. No data. No data. No data. No data. LEL: No data. UEL: No data. Mo data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits: Vapor Pressure (vs. Air or n Hg): Vapor Density (vs. Air = 1):	A viscous liquid No data. No data. No data. No data. No data. No data. No data. LEL: No data. UEL: No data. Mo data.
	Appearance and Odor: pH: Melting Point: Boiling Point: Flash Pt: Evaporation Rate: Flammability (solid, gas): Explosive Limits: Vapor Pressure (vs. Air or n Hg): Vapor Density (vs. Air = 1): Specific Gravity (Water = 1)	A viscous liquid No data. No data. No data. No data. No data. No data. No data. No data. No data. UEL: No data. Mo data. No data.



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.ay	man					Su	upersedes Revis	sion: 08/01/201	
			Secti	on 10. Stability ar	nd Reacti	vity			
10.1	Reactivi	ty:	No data ava	ilable.					
0.2	Stability	:	Unstable [] Stable [X]					
0.3	Stability	Note(s):	Stable if stor	red in accordance with info	mation listed	on the product	insert.		
	Polymerization:		Will occur [] Will not occur [X]					
10.4	Conditions To Avoid:		No data ava	ilable.					
10.5	Incompa To Avoid	atibility - Materials d:	strong oxidiz	zing agents					
10.6	Hazardo	us	carbon dioxi	de					
	Decomp	osition or	carbon mon	oxide					
	Byprodu	icts:							
			Sectio	n 11. Toxicologic	al Informa	ation			
11.1	Informat Toxicolo	tion on ogical Effects:	The toxicolo	gical effects of this product	have not bee	n thoroughly st	udied.		
Carci	nogenicity	/:	NTP? No	IARC Monographs? No	OSHA R	egulated? No			
CAS	#	Hazardous Com	ponents (Ch	emical Name)	NTP	IARC	ACGIH	OSHA	
900	95-64-5			laurate (polysorbate 20; poly(oxy-1,2-ethanediyl)	n.a.	n.a.	n.a.	n.a.	
		ļ	Sect	ion 12. Ecological	Informat	ion	ļ	ļ	
12.1	Toxicity			e into the environment.	interna				
	Texicity	•	Runoff from fire control or dilution water may cause pollution.						
12.2	Persiste	nce and	No data available.						
	Degrada	bility:							
12.3	-	mulative	No data available.						
12.4	Mobility		No data ava	ilable					
12.5	-	of PBT and vPvB							
12.5	assessn								
12.6		lverse effects:	No data ava	ilable.					
			Soctio	n 12 Dianagal C	onoidorat	iono			
12.4	Weste	ionocal Mathed		on 13. Disposal C					
13.1	waste D	isposal Method:	-	accordance with local, state		-			
				tion 14. Transport	Informat	lion			
14.1		RANSPORT (US I	-						
	-	r Shipping Name:	Not dan	gerous goods.					
	OT Hazar								
-	N/NA Nun								
14.1		RANSPORT (Euro	-	-					
		hipping Name:	Not dan	gerous goods.					
	N Numbe								
Н	azaru Cia	55 .							
								Aulti-rogion for	
								Multi-region for	



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14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.

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

Information:

Additional Transport

Section 15. Regulatory Information

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
9005-64-5	(polysorbate 20;	sorbitan Monolaurate Sorbitan, monododecanoate, anediyl) derivatives)	No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA o	r State Lists	·	
9005-64-5	(polysorbate 20;	sorbitan Monolaurate Sorbitan, monododecanoate, anediyl) derivatives)	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No			
Regulatory In Statement:	formation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Oth	ner Informatio	on		
Revision Date	:	12/03/2016				
Additional Info	ormation About	No data available.				
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 warrant 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: 12/03/2016

	CHEMICAL					Supersedes Revision: 08/19/2016
		accord	ding to Regulation (EC) No. 19	07/2006 as amended b	oy (EC) No. 1272/20	008
		Section 1. Ide	entification of the Substa	nce/Mixture and of	f the Company/l	Jndertaking
1.1	Produc	t Code:	400060			
	Produc	t Name:	EIA Buffer Concentrate	(10X)		
1.2	Releva	nt identified uses of t	he substance or mixture	and uses advised a	against:	
	Relev	ant identified uses:	For research use only, n	ot for human or vete	erinary use.	
1.3	Details	of the Supplier of the	e Safety Data Sheet:			
	Comp	any Name:	Cayman Chemical Comj 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	bany		
	Web s	ite address:	www.caymanchem.com			
	Inform	nation:	Cayman Chemical Com	pany	+1 (73	34)971-3335
1.4	-	ncy telephone numb				
	Emer	gency Contact:	CHEMTREC Within USA CHEMTREC Outside US		-	00)424-9300
					•	03)527-3887
			Section 2. Ha	zards Identifi	ication	
2.1 2.2		cation of the Substan lements:	nce or Mixture:			
	GHS	Signal Word:	None			
	GHS	Hazard Phrases:				
	Based	d on evaluation of curre	ently available data this sub	stance or mixture is	s not classifiable a	according to GHS.
		Precaution Phrases:				
	•	rases apply.				
		Response Phrases:				
	-	rases apply. Storage and Disposa	l Phrases			
		•	Storage and Section 13 fo	r Disposal informatio	on.	
2.3			Aterial may be irritating to	·		espiratory tract.
	Effects	and Symptoms: N	lay be harmful by inhalation	n, ingestion, or skin	absorption.	
			lay cause eye, skin, or resp			
					-	ot been thoroughly investigated.
		Sectio	on 3. Composition	h/Information	on Ingredie	ents
CAS RTE	;#/ CS #	Hazardous Compor REACH Registratio	nents (Chemical Name)/ n No.	Concentration	EC No./ EC Index No.	GHS Classification
	58-11-4 580000	Potassium phosphate,	dibasic	13.3 %	231-834-5 NA	No data available.
	78-77-0 615500	Potassium phosphate,	Monobasic	3.21 %	231-913-4 NA	No data available.
	28-22-8 050000	Sodium azide		0.1 %	247-852-1 011-004-00-7	Acute Tox.(O) 2: H300 Aquatic (A) 1: H400 Aquatic (C) 1: H410
	17-14-5 25000	Sodium chloride		23.4 %	231-598-3 NA	No data available.
1944	191-31-1	EDTA, tetrasodium salt	i, hydrate	0.38 %	NA	Acute Tox.(O) 4: H302



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	HEMICAL			,		Supersedes Revision: 08/19/2016
NA					NA	Eye Damage 1: H318
9048 AY929	8-46-8 96000	Bovine Serum Albur	nin (BSA)	1.0 %	232-936-2 NA	Acute Tox.(O) 4: H302
773 ZC01	2-18-5 10000	Water		58.61 %	231-791-2 NA	No data available.
			Section 4. Fi	rst Aid Measu	ires	
4.1	Descrip	otion of First Aid				
	Measur	es:				
	In Case	of Inhalation:	Remove to fresh air. If not bro	eathing, give artificial	l respiration or giv	ve oxygen by trained personnel.
			Get immediate medical attent	tion.		
	In Case	of Skin Contact:	-			5 minutes. Remove contaminated
			clothing. Get medical attentio		-	
	In Case	of Eye Contact:	and tested by medical persor		ater for at least 1	5 minutes. Have eyes examined
	In Case	of Ingestion:	Wash out mouth with water p	rovided person is co	nscious. Never gi	ve anything by mouth to an
			unconscious person. Get me medical personnel.	dical attention. Do No	OT induce vomitir	ng unless directed to do so by
4.2	Importa	ant Symptoms and	I Exposure may cause: abdom	inal pain, congestior	n in internal organ	s, dehydration, diarrhea,
	Effects	, Both Acute and	gastrointestinal disturbances	lowered blood press	sure, nausea, and	I vomiting.
	Delaye	d:				
			Section 5. Fire	Fighting Mea	asures	
5.1	Suitabl	e Extinguishing	Use alcohol-resistant foam, o	arbon dioxide, water	r, or dry chemical	spray.
	Media:		Use water spray to cool fire-	exposed containers.		
	Unsuita Media:	able Extinguishing	A solid water stream may be	inefficient.		
5.2		able Properties an	dNo data available.			
	Hazard	s:				
			No data available.			
	Flash P	Pt:	No data.			
	Explos	ive Limits:	LEL: No data.	UEL: No da	ita.	
	Autoig	nition Pt:	No data.			
5.3	Fire Fig	hting Instructions	s: As in any fire, wear self-cont equivalent), and full protectiv	• • •	-	
			Section 6. Accider	tal Release N	Neasures	
6.1		ive Precautions,	Avoid breathing vapors and	•		
						eathing apparatus, or respirator,
	-	ency Procedures:	and appropriate personal pro-	-		, and heavy rubber gloves).
6.2	Enviror Precau		Take steps to avoid release	into the environment	t, if safe to do so.	
6.3	Method	ls and Material Fo	r Contain spill and collect, as	appropriate.		
	Contair Up:	nment and Cleanir	ngTransfer to a chemical waste	e container for dispos	sal in accordance	with local regulations.



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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 #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
26628-22-8	Sodium azide	ACGIH TLV	CEIL: 0.29 mg/m3	
		Europe	TWA: 0.1 mg/m3	Skin Absorption
			STEL: 0.3 mg/m3	
		France VL	TWA: 0.1 mg/m3	
			STEL: 0.3 mg/m3	
		Britain EH40	TWA: 0.1 mg/m3 ()	Skin Absorption
			STEL: 0.3 mg/m3 ()	

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 equipment:

2.2	Fersonal protection equi	pinent.
	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/Maintenar	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.

Section 9. Physical and Chemical Properties

Information on Basic F	hysical and Chemical Properties
Physical States:	[]Gas [X]Liquid []Solid
Appearance and Odor	A clear, colorless solution
pH:	7.0
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	No data.
Evaporation Rate:	No data.
Flammability (solid, ga	s): No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. A	r or mm No data.
Hg):	
Vapor Density (vs. Air	= 1): No data.



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		iravity (Water =	1): No data.					
	Solubility	in Water:	No data.					
		later Partition	No data.					
	Coefficien	it:						
	Autoigniti	on Pt:	No data.					
	-	sition Temperat	ure: No data.					
	Viscosity:		No data.					
9.2	Other Infor	rmation						
	Percent V	olatile:	No data.					
			Section 10. Stab	ility and	Reactiv	/ity		
10.1	Reactivity	:	No data available.					
10.2	Stability:		Unstable [] Stable [X]					
10.3	Stability N	lote(s):	Stable if stored in accordance	with informat	ion listed o	on the product	insert.	
	Polymeriz	ation:	Will occur [] Will not occ	cur [X]				
10.4	Condition	s To Avoid:	No data available.					
10.5	Incompati	bility - Materials	No data available.					
	To Avoid:							
10.6	Hazardous	S	No data available.					
	Decompos	sition or						
	Byproduc	ts:						
			Section 11. Toxic	ological l	nforma	ition		
11.1	Informatio	on on	The toxicological effects of thi	s compound l	nave not be	een thoroughly	/ studied.	
	Toxicolog	ical Effects:						
Carci	nogenicity:		NTP? No IARC Monogra	phs? No	OSHA Re	gulated? No		
CAS	# H	Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
775	58-11-4 F	Potassium phosp	hate, dibasic		n.a.	n.a.	n.a.	n.a.
777	78-77-0 F	Potassium phosp	hate, Monobasic		n.a.	n.a.	n.a.	n.a.
2662	28-22-8 \$	Sodium azide			n.a.	n.a.	A4	n.a.
764	7-14-5 8	Sodium chloride			n.a.	n.a.	n.a.	n.a.
1944	191-31-1 E	EDTA, tetrasodiu	m salt, hydrate		n.a.	n.a.	n.a.	n.a.
904	18-46-8 E	Bovine Serum Alk	oumin (BSA)		n.a.	n.a.	n.a.	n.a.
773		Water			n.a.	n.a.	n.a.	n.a.
	I		Section 12. Ecol	logical In	formati	 on		
12.1	Tovioitu		Avoid release into the environ	•	Ionnaa			
12.1	Toxicity:		Runoff from fire control or dilu			llution		
12.2	Persistend	a and	No data available.		ly cause pe			
12.2	Degradabi		no dala avallable.					
12.3	Bioaccum	-	No data available.					
12.3	Potential:	ulative	no uala avaliable.					
12.4		Soil:	No data available.					
12.4	Mobility in							
12.5			No data available.					
	assessme		NI I.					
12.6	Other adv	erse effects:	No data available.					
								Iulti-region format



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	Section 13. Dispo	sal Considera	ations	
13.1 Waste	Disposal Method: Dispose in accordance with loc	cal, state, and federa	l regulations.	
	Section 14. Trar	nsport Informa	ation	
14.1 LAND	TRANSPORT (US DOT):			
DOT Prop	er Shipping Name: Not dangerous goods.			
DOT Haza	rd Class:			
UN/NA Nu	mber:			
14.1 LAND	TRANSPORT (European ADR/RID):			
ADR/RID	Shipping Name: Not dangerous goods.			
UN Numbe				
Hazard Cl				
	ANSPORT (ICAO/IATA):			
	A Shipping Name: Not dangerous goods.			
Additional Tra	Insport Transport in accordance with I	ocal, state, and fede	ral regulations.	
Information:				
	Section 15. Regu	latory Inform	ation	
EPA SARA (S	uperfund Amendments and Reauthorization Act	of 1986) Lists		
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 o	r State Lists	
				No: TSCA: Ves -
7758-11-4	Potassium phosphate, dibasic	CAA HAP,ODC:	No; CWA NPDES:	NO, TOOA. 163 -
7758-11-4	Potassium phosphate, dibasic	CAA HAP,ODC: Inventory; CA P		No, 100A. 163-
7758-11-4	Potassium phosphate, dibasic Potassium phosphate, Monobasic	Inventory; CA P CAA HAP,ODC:	ROP.65: No No; CWA NPDES:	
	Potassium phosphate, Monobasic	Inventory; CA P CAA HAP,ODC: Inventory; CA P	ROP.65: No No; CWA NPDES: ROP.65: No	No; TSCA: Yes -
		Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC:	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES:	No; TSCA: Yes -
7778-77-0 26628-22-8	Potassium phosphate, Monobasic Sodium azide	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No	No; TSCA: Yes - No; TSCA: Yes -
7778-77-0	Potassium phosphate, Monobasic	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC:	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES:	No; TSCA: Yes - No; TSCA: Yes -
7778-77-0 26628-22-8	Potassium phosphate, Monobasic Sodium azide	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES:	No; TSCA: Yes - No; TSCA: Yes - No; TSCA: Yes -
7778-77-0 26628-22-8 7647-14-5	Potassium phosphate, Monobasic Sodium azide Sodium chloride	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No	No; TSCA: Yes - No; TSCA: Yes - No; TSCA: Yes -
7778-77-0 26628-22-8 7647-14-5	Potassium phosphate, Monobasic Sodium azide Sodium chloride	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: PROP.65: No	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No	No; TSCA: Yes - No; TSCA: Yes - No; TSCA: Yes - No; TSCA: No; CA
7778-77-0 26628-22-8 7647-14-5 194491-31-1	Potassium phosphate, Monobasic Sodium azide Sodium chloride EDTA, tetrasodium salt, hydrate	Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: PROP.65: No	ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: ROP.65: No No; CWA NPDES: No; CWA NPDES:	No; TSCA: Yes - No; TSCA: Yes - No; TSCA: Yes - No; TSCA: No; CA



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Regulatory Information	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)						
Statement:	No.1272/2008.						
	Section 16. Other Information						
Revision Date:	12/03/2016						
Additional Information About This Product:	No data available.						
	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.						



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

Revision: 12/03/2016 Supersedes Revision: 08/01/2016 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:** 400062 Product Name: Wash Buffer Concentrate (400X) 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. 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: CHEMTREC Within USA and Canada: **Emergency Contact:** +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:** 2.2 Label Elements: GHS Signal Word: None **GHS Hazard Phrases:** Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS. **GHS Precaution Phrases:** No phrases apply. **GHS Response Phrases:** No phrases apply. **GHS Storage and Disposal Phrases:** Please refer to Section 7 for Storage and Section 13 for Disposal information. 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. To the best of our knowledge, the toxicological properties have not been thoroughly investigated. Section 3. Composition/Information on Ingredients CAS#/ Hazardous Components (Chemical Name)/ EC No./ **GHS Classification** Concentration **RTECS # REACH Registration No.** EC Index No. 7758-11-4 Potassium phosphate, dibasic 53.0 % 231-834-5 No data available. TC5580000 NA 7778-77-0 Potassium phosphate, Monobasic 12.9 % 231-913-4 No data available. TC6615500 NA 7732-18-5 Water 231-791-2 34.1 % No data available. ZC0110000 NA



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

Revision: 12/03/2016 Supersedes Revision: 08/01/2016

		Section 4. First Aid Measures
4.1	Description of First Aid	
	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 Media:	g A solid water stream may be inefficient.
5.2	Flammable Properties ar	ndNo data available.
	Hazards:	
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	s: 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
6.1	Protective Precautions,	Avoid breathing vapors and provide adequate ventilation.
	Protective Equipment an	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).
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanin	hgTransfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taker	n Keep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	



8.2

Exposure Controls:

SAFETY DATA SHEET Wash Buffer Concentrate (400X)

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8.2.1	Engineering Controls (Ventilation etc.):	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.				
8.2.2	Personal protection equi					
	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/Maintenar	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.				
	S	ection 9. Physical and Chemical Properties				
9.1	Information on Basic Phys	sical and Chemical Properties				
	Physical States:	[]Gas [X]Liquid []Solid				
	Appearance and Odor:	A clear, colorless solution				
	pH:	7.4				
	Melting Point:	No data.				
	Boiling Point:	No data.				
	Flash Pt:	No data.				
	Evaporation Rate:	No data.				
	Flammability (solid, gas):					
	Explosive Limits:	LEL: No data. UEL: No data.				
	Vapor Pressure (vs. Air o Hg):	r mm No data.				
	Vapor Density (vs. Air = 1): No data.				
	Specific Gravity (Water =	1): No data.				
	Solubility in Water:	No data.				
	Octanol/Water Partition	No data.				
	Coefficient:					
	Autoignition Pt:	No data.				
	Decomposition Temperat	ure: No data.				
	Viscosity:	No data.				
9.2	Other Information					
	Percent Volatile:	No data.				
		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 - Material	strong oxidizing agents				
	To Avoid:					
10.6	Hazardous	phosphorus oxides				
		Multi-region formation				



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

	Revision:	12/03/2016
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	Decomposition or potassium oxides							
	Byproducts:							
	Section 11. Toxicological Information							
11.1	Informat	ion on	The toxicolo	gical effects of this product ha	ve not beer	n thoroughly st	udied.	
	Toxicolo	gical Effects:						
Carci	nogenicity	/:	NTP? No	IARC Monographs? No	OSHA Re	egulated? 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	nformat	ion		
12.1	Toxicity	:	Avoid releas	e into the environment.				
			Runoff from	fire control or dilution water m	ay cause p	ollution.		
12.2	Persiste	nce and	No data ava	ilable.				
	Degrada	bility:						
12.3	Bioaccu	mulative	No data ava	ilable.				
	Potentia							
12.4	Mobility		No data ava					
12.5		of PBT and vPvB	No data ava	ilable.				
	assessm							
12.6	Other ad	verse effects:	No data ava	ilable.				
				n 13. Disposal Cor				
13.1	Waste D	isposal Method:	•	ccordance with local, state, a		•		
			Sect	tion 14. Transport li	nformat	ion		
14.1	LAND T	RANSPORT (US	DOT):					
		r Shipping Name	: Not dan	gerous goods.				
	OT Hazaro							
	N/NA Nun							
14.1		RANSPORT (Euro	•	•				
	N Number	hipping Name:	NOL GAN	gerous goods.				
	azard Cla							
14.3		ANSPORT (ICAO/	IATA):					
	ICAO/IATA Shipping Name: Not dangerous goods.							
Additional Transport			Transport in accordance with local, state, and federal regulations.					
	Information:							



SAFETY DATA SHEET Wash Buffer Concentrate (400X)

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		Section 15. Regu	ulatory Inform	ation	
EPA SARA (S	uperfund Amendn	nents and Reauthorization Ac	t 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 o	r State Lists	
7758-11-4	Potassium phosp	hate, dibasic	CAA HAP,ODC: Inventory; CA P	No; CWA NPDES ROP.65: No	: No; TSCA: Yes -
7778-77-0	Potassium phosp	hate, Monobasic	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 This SDS was prepared in ac Statement: No.1272/2008.			cordance with 29 CFI	R 1910.1200 and R	egulation (EC)
		Section 16. Of	ther Informati	on	
Revision Date	:	12/03/2016			
Additional Info This Product:	ormation About	No data available.			
Company Poli	cy or Disclaimer:	DISCLAIMER: This information currently available to us. Howe express or implied, with respe- use. Users should make their their particular purposes.	ever, we make no wa ct to such informatior	rranty of merchantan, and we assume r	ability or any other warrant no liability resulting from its



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	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: 400074						
	Product	Name:	TMB Substrate Solution				
1.2	Relevan	t identified uses of t	he substance or mixture a	nd uses advised ag	jainst:		
	Relevant identified uses: For research use only, not for human or veterinary use.						
1.3	Details o	of the Supplier of the	e Safety Data Sheet:				
	Company Name: Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108						
	Web si	ite address:	www.caymanchem.com				
	Inform	ation:	Cayman Chemical Comp	any	+1 (734	971-3335	
1.4	Emerger	ncy telephone numb	er:				
	Emerg	ency Contact:	CHEMTREC Within USA	and Canada:	•	0)424-9300	
			CHEMTREC Outside US	A and Canada:	+1 (703	3)527-3887	
			Section 2. Haz	zards Identific	ation		
2.1	Classific	cation of the Substar	nce or Mixture:				
2.2	Label El	ements:					
2.3	GHS Signal Word: None GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS. GHS Precaution Phrases: No phrases apply. GHS Response Phrases: No phrases apply. GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information. 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.						
			_		-	been thoroughly investigated.	
		Sectio	n 3. Composition	/Information c	on Ingredier	nts	
CAS RTE	# / CS #	Hazardous Compor REACH Registration	nents (Chemical Name)/ n No.	Concentration	EC No./ EC Index No.	GHS Classification	
NA TMB Substrate Solution NA			100.0 %	NA NA	No data available.		



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		Section 4. First Aid Measures
4.1	Description of First Aid	
	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 an	dNo data available.
	Hazards:	
		No data available.
	Flash Pt:	170.00 F (76.7 C) Method Used: Closed Cup
	Explosive Limits:	LEL: No data. UEL: 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.
		Section 6. Accidental Release Measures
6.1	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).
6.2	Environmental	Take steps to avoid release into the environment, if safe to do so.
	Precautions:	
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanir	\log 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.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	



	HEMICAL	Supersedes Revision: 08/01/2016
8.2	Exposure Controls:	
8.2.1		se process enclosures, local exhaust ventilation, or other engineering controls to control airborne
	(Ventilation etc.): le	vels below recommended exposure limits.
8.2.2	Personal protection equipm	ent:
	Eye Protection: Sa	afety glasses
	Protective Gloves: C	ompatible chemical-resistant gloves
	Other Protective Clothing:La	ab coat
	Respiratory Equipment N	IOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintenan D	o not take internally.
	ce Practices: Fa	acilities storing or utilizing this material should be equipped with an eyewash and a safety shower
	W	ash thoroughly after handling.
	N	o data available.
	Soc	tion 0 Physical and Chamical Proparties
		tion 9. Physical and Chemical Properties
9.1	Information on Basic Physics	· · · · · · · · · · · · · · · · · · ·
	Physical States:	[]Gas [X]Liquid []Solid
	Appearance and Odor:	Solution
	pH:	5.9
	Melting Point:	No data.
	Boiling Point:	No data.
	Flash Pt:	170.00 F (76.7 C) Method Used: Closed Cup
	Evaporation Rate:	No data.
	Flammability (solid, gas):	No data available.
	Explosive Limits:	LEL: No data. UEL: No data.
	Vapor Pressure (vs. Air or m	nm No data.
	Hg):	
	Vapor Density (vs. Air = 1):	No data.
	Specific Gravity (Water = 1):	No data.
	Solubility in Water:	No data.
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Temperature	e: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
		Section 10. Stability and Reactivity
10.1	Reactivity: N	o data available.
10.2		nstable [] Stable [X]
10.3	-	table if stored in accordance with information listed on the product insert.
		/ill occur [] Will not occur [X]
10.4	-	o data available.
-		
10.5	Incompatibility - Materials st To Avoid:	TO BY ON ULTING AVENIS
10.6		arbon dioxide
10.0		arbon monoxide
		Multi-region forma
		wulti-region forma



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Decor	nposition or	nitrogen oxides					
Bypro	ducts:						
		Section 11. Toxico	ological Ir	nforma	tion		
11.1 Inform	.1 Information on The toxicological effects of this product have not been thoroughly studied.						
Toxico	ological Effects:						
Carcinogenic	ity:	NTP? No IARC Monograp	ohs? No	OSHA Re	gulated? No		
CAS #	Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
NA	TMB Substrate S	olution		n.a.	n.a.	n.a.	n.a.
		Section 12. Ecolo	ogical Inf	ormati	on		
12.1 Toxici	ty:	Avoid release into the environm	nent.				
		Runoff from fire control or dilute	ion water may	cause po	ollution.		
12.2 Persis	stence and	No data available.					
Degra	dability:						
12.3 Bioac	cumulative	No data available.					
Poten	tial:						
12.4 Mobili	ty in Soil:	No data available.					
12.5 Resul	ts of PBT and vPvB	No data available.					
	sment:						
12.6 Other	adverse effects:	No data available.					
		Section 13. Dispo	sal Cons	iderati	ons		
13.1 Waste	Disposal Method:	Dispose in accordance with loc	cal, state, and	federal re	gulations.		
		Section 14. Trar	nsport Inf	ormati	on		
14.1 LAND	TRANSPORT (US	DOT):					
DOT Pro	per Shipping Name	Not dangerous goods.					
DOT Haz	ard Class:						
UN/NA N	umber:						
14.1 LAND	TRANSPORT (Eur	opean ADR/RID):					
ADR/RID	Shipping Name:	Not dangerous goods.					
UN Numl							
Hazard C							
	RANSPORT (ICAO	-					
	A Shipping Name:	Not dangerous goods.					
Additional T	-	Transport in accordance with l	ocal, state, ar	id rederal	regulations.		
intormation.		Castion 15 Dam					
		Section 15. Regu					
•		nents and Reauthorization Act					
CAS #		ponents (Chemical Name)	S. 302 (EI		S. 304 RQ		B (TRI)
NA	TMB Substrate S	Olution	No		No	No	
CAS #		ponents (Chemical Name)	Other US				
NA	TMB Substrate S	olution	CAA HAP PROP.65		; CWA NPDE	S: No; TSCA:	No; CA
						Ν	Iulti-region form



Revision: 12/03/2016 Supersedes Revision: 08/01/2016

Connan	Supersedes Revision: 08/01/2016					
Regulatory Information	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)					
Statement:	No.1272/2008.					
	Section 16. Other Information					
Revision Date:	12/03/2016					
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.					



Revision: 01/13/2017

	according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008					
		Section 1.	Identification of the Substar	nce/Mixture and of	the Company/U	ndertaking
1.1	Product	Code:	401551			
	Product	Name:	Anti-Annexin A1 (human) HRP Conjugate		
1.2	Relevan	t identified uses o	of the substance or mixture a	and uses advised a	igainst:	
	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		
	Web s	ite address:	www.caymanchem.com			
	Inform	nation:	Cayman Chemical Comp	bany	+1 (734	4)971-3335
1.4	-	ncy telephone nu	mber:			
	Emerg	Jency Contact:	CHEMTREC Within USA		-	0)424-9300
			CHEMTREC Outside US		•	3)527-3887
			Section 2. Ha	zards Identifi	cation	
2.1 2.2		cation of the Subs lements:	stance or Mixture:			
	GHS S	Signal Word:	None			
		Hazard Phrases:	None			
	Based	on evaluation of c	urrently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.
	GHS F	Precaution Phrase	es:			
	No ph	rases apply.				
		Response Phrases	5:			
	•	rases apply.				
		Storage and Dispo	osal Phrases:			
2.3		rases apply. e Human Health	Material may be irritating to t	he mucous membra	ines and upper res	piratory tract
2.0		and Symptoms:	May be harmful by inhalation			
			May cause eye, skin, or resp			
			To the best of our knowledge	e, the toxicological p	roperties have not	been thoroughly investigated.
		Sect	tion 3. Composition	/Information	on Ingredie	nts
CAS RTE	# / CS #	Hazardous Com REACH Registra	ponents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA		Anti-Annexin A1 (hu	man) HRP Conjugate	0.1 -5.0 %	NA NA	No data available.
NA NA			lase Conjugate Stabilizer	95.0 -99.5 %	NA NA	No data available.



Revision: 01/13/2017

		Section 4. First Aid Measures
4.1	Description of First Aid	
	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 Extinguishinoุ Media:	g A solid water stream may be inefficient.
5.2	Flammable Properties ar Hazards:	ı d No data available.
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	s : 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
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
	Protective Equipment an	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).
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3		r Contain spill and collect, as appropriate.
		ng Transfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taker	Keep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
1	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	



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.				
ð.2.2	Personal protection equi					
	Eye Protection:	Safety glasses				
	Protective Gloves:	Compatible chemical-resistant gloves				
	Other Protective Clothing					
	Respiratory Equipment (Specify Type):	NIOSH approved respirator, as conditions warrant.				
	Work/Hygienic/Maintenar	Do not take internally.				
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety showe				
		Wash thoroughly after handling.				
		No data available.				
	S	ection 9. Physical and Chemical Properties				
9.1	Information on Basic Phys	sical and Chemical Properties				
	Physical States:	[]Gas [X]Liquid []Solid				
	Appearance and Odor:	A liquid				
	pH:	No data.				
	Melting Point:	No data.				
	Boiling Point:	No data.				
	Flash Pt:	No data.				
	Evaporation Rate:	No data.				
	Flammability (solid, gas):	No data available.				
	Explosive Limits:	LEL: No data. UEL: No data.				
	Vapor Pressure (vs. Air o Hg):	r mm No data.				
	Vapor Density (vs. Air = 1): No data.				
	Specific Gravity (Water =	1): No data.				
	Solubility in Water:	No data.				
	Octanol/Water Partition	No data.				
	Coefficient:					
	Autoignition Pt:	No data.				
	Decomposition Temperat					
	Viscosity:	No data.				
9.2	Other Information					
9.Z	Percent Volatile:	No data.				
	Fercent volatile.					
	Burnet M	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 - Materials	s No data available.				
	To Avoid:					
10.6	Hazardous	No data available.				
		Multi-region form				



Revision: 01/13/2017

)ecompo Syprodu	osition or cts:						
			Section 11. Toxico	ological	Informa	ation		
	nformati oxicolo	ion on gical Effects:	The toxicological effects of this				ıdied.	
CAS #		Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
N/	A	Anti-Annexin A1	(human) HRP Conjugate		n.a.	n.a.	n.a.	n.a.
N/	A	Horseradish pero	oxidase Conjugate Stabilizer		n.a.	n.a.	n.a.	n.a.
	·		Section 12. Ecol	ogical Ir	formati	on	·	·
12.1 T			Avoid release into the environr Runoff from fire control or dilut		ay cause po	ollution.		
	Persistence andNo data available.Degradability:							
12.3 B								
12.4 M								
12.6 O	Other ad	verse effects:	No data available.					
			Section 13. Dispo	sal Con	siderati	ons		
13.1 W	3.1 Waste Disposal Method: Dispose in accordance with local, state, and federal regulations.							
			Section 14. Trar	nsport Ir	formati	ion		
14.1 L	AND TH	RANSPORT (US I	DOT):	•				
DOT	F Proper	r Shipping Name	Not dangerous goods.					
_		d Class:						
		RANSPORT (Euro	opean ADR/RID): Not dangerous goods.					
	Number		Not dangerous goods.					
Haza	ard Clas	SS:						
14.3 A	AIR TRA	NSPORT (ICAO/	IATA):					
ICAC	O/IATA	Shipping Name:	Not dangerous goods.					
Additior Informat		isport	Transport in accordance with I	ocal, state, a	and federal	regulations.		
			Section 15. Regu	ulatory Ir	nformat	ion		
EPA SA	RA (Su	perfund Amendm	nents and Reauthorization Act	t of 1986) Li	sts			
CAS #		Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313	i (TRI)
N/	A	Anti-Annexin A1	(human) HRP Conjugate	No		No	No	
N/	A	Horseradish pero	oxidase Conjugate Stabilizer	No		No	No	
CAS #		Hazardous Com	ponents (Chemical Name)	Other US	S EPA or S	tate Lists		
N/	A	Anti-Annexin A1	(human) HRP Conjugate	CAA HA PROP.6		; CWA NPDE	S: No; TSCA:	No; CA
				•			N	lulti-region forma



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NA Horseradish pero	oxidase Conjugate Stabilizer	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; 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. Ot	her Information		
Revision Date:	01/13/2017			
Additional Information About This Product:	No data available.			
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: 01/13/2017

		acco	ording to Regulation (EC) No. 190	7/2006 as amended by	/ (EC) No. 1272/200	8
		Section 1. I	dentification of the Substan	ce/Mixture and of	the Company/Ur	ndertaking
1.1	Product Product		401552 Anti-Annexin A1 (human)	ELISA Strip Plate		
1.2	Relevan	t identified uses of	f the substance or mixture a	-	gainst:	
		Int identified uses:			-	
1.3	Details o	of the Supplier of t	he Safety Data Sheet:			
	Compa	any Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	any		
	Web s	ite address:	www.caymanchem.com			
	Inform	ation:	Cayman Chemical Comp	any	+1 (734	4)971-3335
1.4	-	ncy telephone num				
	Emerg	ency Contact:	CHEMTREC Within USA			0)424-9300
			CHEMTREC Outside US			3)527-3887
			Section 2. Haz	zards Identific	cation	
2.1		cation of the Subst	ance or Mixture:			
2.2	Label El	ements:				
		ignal Word:	None			
		lazard Phrases:				
			rrently available data this subs	stance or mixture is i	not classifiable ac	cording to GHS.
		Precaution Phrases ases apply.	5.			
	-	ases apply: Response Phrases:				
		ases apply.				
	•	Storage and Dispos	sal Phrases:			
	Please	e refer to Section 7 f	or Storage and Section 13 for	Disposal information	n.	
2.3	Adverse	e Human Health	Material may be irritating to the	ne mucous membrar	nes and upper res	piratory tract.
	Effects	and Symptoms:	May be harmful by inhalation	-	-	
			May cause eye, skin, or resp			
				· · · ·	•	been thoroughly investigated.
		Secti	on 3. Composition	/Information of	on Ingredier	nts
CAS RTE	#/ CS #	Hazardous Comp REACH Registrati	onents (Chemical Name)/ ion No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA		Anti-Annexin A1 (hun	nan) ELISA Strip Plate	100.0 %	NA NA	No data available.
				ł	+	•



Revision: 01/13/2017

Description of First Aid	
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
Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
Media:	Use water spray to cool fire-exposed containers.
Unsuitable Extinguishing Media:	A solid water stream may be inefficient.
Flammable Properties and Hazards:	No data available.
	No data available.
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 raising and breathing dust, and provide adequate ventilation.
Protective Equipment and	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 Precautions:	Take steps to avoid release into the environment, if safe to do so.
Methods and Material For	Contain spill and collect, as appropriate.
Containment and Cleanin Up:	${f g}$ Transfer to a chemical waste container for disposal in accordance with local regulations.
	Section 7. Handling and Storage
Precautions To Be Taken	Avoid breathing dust/fume/gas/mist/vapours/spray.
	Avoid prolonged or repeated exposure.
	Keep container tightly closed.
in Storing:	Store in accordance with information listed on the product insert.
Sect	ion 8. Exposure Controls/Personal Protection
Exposure Parameters:	
	In Case of Inhalation: In Case of Skin Contact: In Case of Eye Contact: In Case of Ingestion: Suitable Extinguishing Media: Unsuitable Extinguishing Media: Flammable Properties and Hazards: Flash Pt: Explosive Limits: Autoignition Pt: Fire Fighting Instructions Protective Precautions, Protective Precautions, Protective Equipment and Emergency Procedures: Environmental Precautions: Methods and Material For Containment and Cleaning Up: Precautions To Be Taken in Handling: Precautions To Be Taken in Storing:



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 equi	oment:
	Eye Protection:	Safety glasses
	Protective Gloves:	Compatible chemical-resistant gloves
	Other Protective Clothing	
	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 and a safety shower
		Wash thoroughly after handling.
		No data available.
	<u> </u>	ection 9. Physical and Chemical Properties
9.1		
J.I	Physical States:	sical and Chemical Properties []Gas []Liquid [X]Solid
	Appearance and Odor:	
	pH:	No data.
	рп: Melting Point:	No data.
	Boiling Point:	No data.
	Flash Pt:	No data.
	Evaporation Rate:	No data.
	Flammability (solid, gas):	
	Explosive Limits:	LEL: No data. UEL: No data.
	Vapor Pressure (vs. Air o	
	Hg):	
	Vapor Density (vs. Air = 1): No data.
	Specific Gravity (Water =	1): No data.
	Solubility in Water:	No data.
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Temperat	ure: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
		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 - Materials	s No data available.
	To Avoid:	
10.6	Hazardous	No data available.
-		
		Multi-region forma



Revision: 01/13/2017

	-	osition or							
	Byprod	ucts:							
			Section 11. Toxico	ological Infor	mation				
11.1	Informa Toxicol	tion on ogical Effects:	The toxicological effects of this	product have not	been thoroughly st	udied.			
CAS	#	Hazardous Cor	nponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
	NA	Anti-Annexin A1	(human) ELISA Strip Plate	n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecol	ogical Inform	nation				
12.1	Toxicity	:	Avoid release into the environr	ment.					
			Runoff from fire control or dilution water may cause pollution.						
12.2	Persiste	ence and	No data available.						
	Degrada	ability:							
12.3	Bioaccumulative No data available.								
	Potential:								
12.4	Mobility in Soil: No data available.								
12.5	Results	of PBT and vPvI	B No data available.						
	assessr	nent:							
12.6	Other a	dverse effects:	No data available.						
			Section 13. Dispo	sal Conside	rations				
13.1	Waste D	isposal Method:	Dispose in accordance with loc	cal, state, and fede	ral regulations.				
			Section 14. Trar	nsport Inforn	nation				
14.1	LAND 1	RANSPORT (US	DOT):						
D	OT Prope	er Shipping Name	e: Not dangerous goods.						
D	OT Hazar	d Class:							
U	N/NA Nu	nber:							
14.1	LAND 1	RANSPORT (Eu	ropean ADR/RID):						
Α	DR/RID S	hipping Name:	Not dangerous goods.						
U	N Numbe	r:							
н	azard Cla	ISS:							
14.3	AIR TR	ANSPORT (ICAO	/IATA):						
IC	CAO/IATA	Shipping Name	Not dangerous goods.						
	tional Tra mation:	nsport	Transport in accordance with I	ocal, state, and fee	leral regulations.				
			Section 15. Regu	latory Inforr	nation				
EPA	SARA (Si	perfund Amend	ments and Reauthorization Act	•					
CAS	-	1	nponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 31	3 (TRI)		
	NA	Anti-Annexin A1	(human) ELISA Strip Plate	No	No	No			
CAS	#	Hazardous Cor	nponents (Chemical Name)	Other US EPA	or State Lists	ł			
	NA	Anti-Annexin A1	(human) ELISA Strip Plate	CAA HAP,ODO PROP.65: No	C: No; CWA NPDE	S: No; TSCA	: No; CA		
				-					



Regulatory Information	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)
Statement:	No.1272/2008.
	Section 16. Other Information
Revision Date:	01/13/2017
Additional Information About	No data available.
This Product:	
	No data available. 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 Annexin A1 (human) ELISA Standard

Revision: 01/13/2017

		acc	cording to Regulation (EC) No. 190	07/2006 as amended by	y (EC) No. 1272/200	08
		Section 1.	Identification of the Substar	nce/Mixture and of	the Company/U	ndertaking
1.1	Product Product		401554 Annexin A1 (human) ELI	SA Standard		
1.2	Relevan	t identified uses o	of the substance or mixture a	and uses advised a	gainst:	
	Releva	ant identified uses	: For research use only, n	ot for human or vete	rinary 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		
	Web s	ite address:	www.caymanchem.com			
	Inform	ation:	Cayman Chemical Comp	bany	+1 (73	4)971-3335
1.4	-	ncy telephone nur jency Contact:	mber: CHEMTREC Within USA	and Canada:	+1 (80	0)424-9300
			CHEMTREC Outside US			3)527-3887
			Section 2. Ha	zards Identifi	cation	
2.1 2.2 2.3	 2.2 Label Elements: A GHS Signal Word: None A GHS Hazard Phrases: Based on evaluation of currently available data this substance or mixture is not classifiable according to GHS. A GHS Precaution Phrases: No phrases apply. A GHS Response Phrases: No phrases apply. A GHS Storage and Disposal Phrases: Please refer to Section 7 for Storage and Section 13 for Disposal information. 					
CAS		-	oonents (Chemical Name)/	Concentration	EC No./	GHS Classification
	CS #	REACH Registra		0.4.0/	EC Index No.	
NA NA		Annexin A1 (human)) ELISA Standard	< 0.1 %	NA NA	No data available.
NA NA		EIA Buffer		>99.9 %	NA NA	Eye Damage 2A: H319



Revision: 01/13/2017

		Section 4. First Aid Measures	
4.1	Description of First Aid		
	Measures:		
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personn Get immediate medical attention.	el.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contamina clothing. Get medical attention if symptoms occur. Wash clothing before reuse.	ated
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examinand tested by medical personnel.	ned
	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 Media:	g A solid water stream may be inefficient.	
5.2	Flammable Properties an Hazards:	I d No data available.	
		No data available.	
	Flash Pt:	No data.	
	Explosive Limits:	LEL: No data. UEL: No data.	
	Autoignition Pt:	No data.	
5.3	Fire Fighting Instructions	s: 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	
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.	
	Protective Equipment an	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirate	or,
	Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).	
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.	
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.	
	Containment and Cleanir	ngTransfer to a chemical waste container for disposal in accordance with local regulations.	
	Up:		
		Section 7. Handling and Storage	
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.	
	in Handling:	Avoid prolonged or repeated exposure.	
7.2	Precautions To Be Taker	NKeep container tightly closed.	
	in Storing:	Store in accordance with information listed on the product insert.	
	Sec	tion 8. Exposure Controls/Personal Protection	
8.1	Exposure Parameters:		



SAFETY DATA SHEET Annexin A1 (human) ELISA Standard

Revision: 01/13/2017

	HEMICAL								
8.2	Exposure Controls:								
8.2.1		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 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 and a safety showe							
		Wash thoroughly after handling.							
		No data available.							
	Se	ection 9. Physical and Chemical Properties							
9.1	Information on Basic Phys	ical and Chemical Properties							
	Physical States:	[]Gas []Liquid [X]Solid							
	Appearance and Odor:	lyophilized solid							
	pH:	No data.							
	Melting Point:	No data.							
	Boiling Point:	No data.							
	Flash Pt:	No data.							
	Evaporation Rate:	No data.							
	Flammability (solid, gas):	No data available.							
	Explosive Limits:	LEL: No data. UEL: No data.							
	Vapor Pressure (vs. Air or	mm No data.							
	Hg):								
	Vapor Density (vs. Air = 1)	: No data.							
	Specific Gravity (Water = 1): No data.							
	Solubility in Water:	No data.							
	Octanol/Water Partition	No data.							
	Coefficient:								
	Autoignition Pt:	No data.							
	Decomposition Temperatu	ire: No data.							
	Viscosity:	No data.							
9.2	Other Information								
	Percent Volatile:	No data.							
		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	-	No data available.							
10.5	Incompatibility - Materials	strong oxidizing agents							
	To Avoid:								
	TO AVOIU.								
10.6		No data available.							



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		Section 11. Toxico	ological Inforr	nation				
	rmation on icological Effects:	The toxicological effects of this			udied.			
CAS #	Hazardous Con	nponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
NA	Annexin A1 (hun	nan) ELISA Standard	n.a.	n.a.	n.a.	n.a.		
NA	EIA Buffer		n.a.	n.a.	n.a.	n.a.		
		Section 12. Ecol	ogical Inform	ation	•			
2.1 To	icity:							
		Runoff from fire control or dilut	ion water may cause	pollution.				
2.2 Per	sistence and	No data available.						
Deg	radability:							
2.3 Bio	accumulative	No data available.						
Pot	ential:							
2.4 Mo	oility in Soil:	No data available.						
2.5 Res	ults of PBT and vPvE	No data available.						
ass	essment:							
2.6 Oth	er adverse effects:	No data available.						
		Section 13. Dispo	sal Considera	ations				
3.1 Wa	ste Disposal Method:	Dispose in accordance with lo	cal, state, and federa	I regulations.				
		Section 14. Trar	nsport Inform	ation				
14.1 LA	ND TRANSPORT (US							
	roper Shipping Name							
	azard Class:							
-	Number:							
14.1 LA	ND TRANSPORT (Eur	opean ADR/RID):						
	ID Shipping Name:	Not dangerous goods.						
UN Nu								
Hazar	l Class:							
14.3 Alf	R TRANSPORT (ICAO	/IATA):						
ICAO/	ATA Shipping Name:	Not dangerous goods.						
Additiona	Transport	Transport in accordance with	local, state, and fede	ral regulations.				
Informatio	n:							
		Section 15. Regu	ulatory Inform	ation				
EPA SAR	A (Superfund Amendr	nents and Reauthorization Act	•					
CAS #	· · ·	nponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313	B (TRI)		
NA		nan) ELISA Standard	No	No	No	<u> </u>		
NA	EIA Buffer		No	No	No			
CAS #	Hazardous Con	ponents (Chemical Name)	Other US EPA o	r State Lists	ļ			
		nan) ELISA Standard		P,ODC: No; CWA NPDES: No; TSCA: No; CA				



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NA EIA Buffer		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				
Regulatory Information Statement:	This SDS was prepared in acco No.1272/2008.	rdance with 29 CFR 1910.1200 and Regulation (EC)				
	Section 16. Oth	ner Information				
Revision Date:	01/13/2017					
Additional Information About This Product:	No data available.					
Company Policy or Disclaimer:	currently available to us. Howev express or implied, with respect	is believed to be accurate and represents the best information er, we make no warranty of merchantability or any other warranty, to such information, and we assume no liability resulting from its wn investigations to determine the suitability of the information for				



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.1		cording to Regulation (EC) No. 1907/2006 as amended by	(EC) No. 1272/2008					
4								
4	Section 1.	Identification of the Substance/Mixture and of the	ne Company/Undertaking					
• •	Product Code:	10011355						
	Product Name:	HRP Stop Solution						
.2	Relevant identified uses of	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 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 nui	mber:						
	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	Classification of the Subs	stance or Mixture:						
	Skin Corrosion/Irritation	n, Category 2						
2.2	Label Elements:							
	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati	Warning on.						
	GHS Signal Word: GHS Hazard Phrases:	on.						
	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati	on. s:						
Z	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor	on. s:	on}.					
 Z	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases	on. •s: oughly after handling. loves/protective clothing/eye protection/face protecti	on}.					
Z	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: Y	on. • s: oughly after handling. loves/protective clothing/eye protection/face protecti s: Wash with plenty of soap and water.	on}.					
. .∠	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: Y P332+313: If skin irritation	on. Is: oughly after handling. loves/protective clothing/eye protection/face protecti s: Wash with plenty of soap and water. n occurs, get medical advice/attention.	on}.					
Z	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrases P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: V P332+313: If skin irritation P362+364: Take off conta	on. Is: oughly after handling. loves/protective clothing/eye protection/face protecti S: Wash with plenty of soap and water. n occurs, get medical advice/attention. aminated clothing and wash it before reuse.	on}.					
Z	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: V P332+313: If skin irritation P362+364: Take off conta GHS Storage and Dispon	on. Is: oughly after handling. loves/protective clothing/eye protection/face protecti s: Wash with plenty of soap and water. In occurs, get medical advice/attention. aminated clothing and wash it before reuse. bsal Phrases:						
	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrases P264: Wash {hands} thor P280: Wear {protective gi GHS Response Phrases P302+352: IF ON SKIN: V P332+313: If skin irritation P362+364: Take off conta GHS Storage and Dispon Please refer to Section 7	on. Is: oughly after handling. loves/protective clothing/eye protection/face protection S: Wash with plenty of soap and water. In occurs, get medical advice/attention. aminated clothing and wash it before reuse. Isal Phrases: for Storage and Section 13 for Disposal information.						
2.3	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: Y P332+313: If skin irritation P362+364: Take off conta GHS Storage and Dispon Please refer to Section 7 Adverse Human Health	on. Is: oughly after handling. loves/protective clothing/eye protection/face protecti s: Wash with plenty of soap and water. In occurs, get medical advice/attention. aminated clothing and wash it before reuse. bsal Phrases:						
	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrases P264: Wash {hands} thor P280: Wear {protective gi GHS Response Phrases P302+352: IF ON SKIN: V P332+313: If skin irritation P362+364: Take off conta GHS Storage and Dispon Please refer to Section 7	on. Is: oughly after handling. loves/protective clothing/eye protection/face protection S: Wash with plenty of soap and water. In occurs, get medical advice/attention. aminated clothing and wash it before reuse. Isal Phrases: for Storage and Section 13 for Disposal information. Causes skin irritation.	es and upper respiratory tract.					
	GHS Signal Word: GHS Hazard Phrases: H315: Causes skin irritati GHS Precaution Phrase P264: Wash {hands} thor P280: Wear {protective g GHS Response Phrases P302+352: IF ON SKIN: Y P332+313: If skin irritation P362+364: Take off conta GHS Storage and Dispon Please refer to Section 7 Adverse Human Health	on. s: oughly after handling. loves/protective clothing/eye protection/face protecti s: Wash with plenty of soap and water. n occurs, get medical advice/attention. aminated clothing and wash it before reuse. sal Phrases: for Storage and Section 13 for Disposal information. Causes skin irritation. Material may be irritating to the mucous membrane	es and upper respiratory tract.					



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Section 3. Composition/Information on Ingredients								
CAS # RTEC		-	azardous Components (Chemical Name)/ EACH Registration No.		EC No./ EC Index No.	GHS Classification		
7664-93-9 Sulfuric acid WS5600000				4.904 %	231-639-5 016-020-00-8	Skin Corr. 1A: H314		
7732 ZC011	-18-5 0000	Water		95.096 %	231-791-2 NA	No data available.		
			Section 4. Fi	rst Aid Measu	ires			
4.1	Descrip	tion of First Aid						
	Measur	es:						
	In Case	of Inhalation:	Remove to fresh air. If not bre personnel. Get immediate me		respiration or giv	e oxygen by trained		
	In Case of Skin Contact:		Immediately wash skin with se contaminated clothing. Get m					
	In Case	of Eye Contact:	Hold eyelids apart and flush e examined and tested by medi		ater for at least 15	5 minutes. Have eyes		
	In Case	of Ingestion:	Do NOT induce vomiting. Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention.					
			Section 5. Fire	Fighting Mea	sures			
5.1	Suitable	e Extinguishing	Use alcohol-resistant foam, c			sprav.		
	Media:	5 5	,		, ,			
	Unsuita Media:	ble Extinguishing	g A solid water stream may be	inefficient.				
5.2	Flamma Hazarda	-	nd Emits toxic and corrosive fur	nes under fire conditi	ons.			
			No data available.	le.				
	Flash P	t:	No data.					
	Explosi	ve Limits:	LEL: No data. UEL: No data.					
	Autoigr	nition Pt:	No data.					
5.3	Fire Fig	hting Instructions	s: As in any fire, wear self-conta equivalent), and full protective		-			
			Section 6. Acciden	tal Release N	/leasures			
6.1	Protect	ive Precautions,	Avoid breathing vapors and	provide adequate ve	ntilation.			
	Protect	ive Equipment an	d As conditions warrant, wear	a NIOSH approved s	self-contained bre	athing apparatus, or respirator,		
	Emerge	ency Procedures:	and appropriate personal pro	otection (rubber boot	s, safety goggles,	, and heavy rubber gloves).		
6.2	Enviror Precaut		Take steps to avoid release	into the environment	, if safe to do so.			
6.3			r Contain spill and collect, as a	appropriate.				
			ngTransfer to a chemical waste		al in accordance	with local regulations.		
	Up:		-					



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cuy			Supersedes Rev	vision: 08/01/2016				
		Section 7. Hand	ling and Storage					
7.1	Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.							
	in Handling: Avoi	d prolonged or repeated ex	posure.					
7.2	Precautions To Be Taken Keep	container tightly closed.						
	in Storing: Store	e in accordance with inform	ation listed on the product insert.					
	Section	8. Exposure Con	trols/Personal Protection					
8.1	Exposure Parameters:							
CAS	# Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations				
7664-	93-9 Sulfuric acid	ACGIH TLV	TLV: (1 mg/m3)					
			STEL: (3 mg/m3)					
		France VL	TWA: 1.0 mg/m3					
			STEL: 3.0 mg/m3					
	Europeuro Controlo:	OSHA PELs	PEL: 1 mg/m3					
8.2	Exposure Controls:			4				
8.2.1			exhaust ventilation, or other engineering controls	to control airborne				
	()	s below recommended exp	osure influs.					
8.2.2								
	-	ty 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 Don							
		v v	material should be equipped with an eyewash fa	cility and a safety				
	shov	/er. h thoroughly after handling.						
		ata available.						
	Section	on 9. Physical an	d Chemical Properties					
9.1	Information on Basic Physical a	and Chemical Properties						
	Physical States:	[]Gas [X]Liquid	[] Solid					
	Appearance and Odor:	Solution						
	pH:	7.0						
	Melting Point:	No data.						
	Boiling Point:	No data.						
	Flash Pt:	No data.						
	Evaporation Rate:	No data.						
	Flammability (solid, gas):	No data available.						
	Explosive Limits:	LEL: No data.	UEL: No data.					
	Vapor Pressure (vs. Air or mm	No data.						
	Hg):							
	Vapor Density (vs. Air = 1):	No data.						
I								



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	CHEMICAL	Supersedes Revision. 06/01/2016
	Specific Gravity (Water	= 1): No data.
	Solubility in Water:	No data.
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Tempera	ature: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
		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	I Is bases
	To Avoid:	halogens
		hydrides
		lithium
		metal acetylides
		metals
		organic material
		oxides
		potassium chlorate
		potassium perchlorate
		potassium permanganate
		sodium
		strong oxidizing agents
		strong reducing agents
10.6	Hazardous	carbon dioxide
	Decomposition or	hydrogen cyanide
	Byproducts:	hydrogen sulfide



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	HEMICAL					Sup	ersedes Revis	sion: 08/01/20
			Sectio	n 11. Toxicologi	cal Informa	tion		
11.1 Carcir	Information on The toxicological effects of this product have not been thoroughly studied. Toxicological Effects: Sulfuric acid - Toxicity Data: Oral LD50 (rat): 2,140 mg/kg; Inhalation TCLO (human): 0.1 mg/m3; Inhalation LC50 (mouse): 320 mg/m3; Inhalation LC50 (guinea pig): 18 mg/m3 (Sulfuric acid - Irritation Data: Eyes (rabbit): 5 mg (30s) severe; Chronic Toxicological Sulfuric acid - Investigated as a reproductive effector. Effects: Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presente See actual entry in RTECS for complete information. Sulfuric Acid RTECS Number: WS5600000 NTP? No Inogenicity: NTP? No						g/m3 (8hr);	
CAS #	#	Hazardous Com	ponents (Ch	emical Name)	NTP	IARC	ACGIH	OSHA
7664	4-93-9	Sulfuric acid		,	Known	Unknown	A2	n.a.
773	2-18-5	Water			n.a.	n.a.	n.a.	n.a.
		ļ	Soot	ion 12 Ecologia				
				ion 12. Ecologica				
12.1	Toxicity	:		se into the environment.		llution		
12.2	Persiste	nce and	No data ava	fire control or dilution wat	er may cause po			
12.2	Degrada		ino uala ava	11001C.				
12.3	Bioaccu	-	No data ava	ilable.				
	Potentia							
12.4	Mobility		No data available.					
12.5	-		No data available.					
	assessm	nent:						
12.6	Other ad	lverse effects:	No data ava	ilable.				
			Sectio	on 13. Disposal (Considerati	ons		
13.1	Waste D	isposal Method:	Dispose in a	accordance with local, sta	te, and federal re	gulations.		
			Sec	tion 14. Transpo	rt Informati	on		
14.1	LAND T	RANSPORT (US I	DOT):					
D		r Shipping Name:	-	acid [with 51% or less ac	id]			
	OT Hazaro		8	CORROSIVE				
U	N/NA Nun	nber:	2796		Packing Group):	П	
	DR/RID SI	RANSPORT (Euro hipping Name:	Sulfuric		-			
-	N Number		2796		Packing Group):	II	
Ha	azard Cla	SS:	8 - COF	ROSIVE				



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14.3 AIR TRANSPORT (ICAO/	ATA):				
ICAO/IATA Shipping Name:	Sulfuric acid [with 51% o	r less acid]			
UN Number:	2796	Packing Group:	II		
Hazard Class:	8 - CORROSIVE	IATA Classification:	8		
Additional Transport	Transport in accordance with local, state, and federal regulations.				
Information:	When sold in quantities of less	ss than or equal to 1 mL, or 1 g, with ar	n Excepted Quantity Code of		
	E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10.				
	Therefore packaging does no	ot have to be labeled as Dangerous Go	ods/Excepted Quantity.		

Section 15. Regulatory Information

CAS #	Hazardous Cor	nponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7664-93-9	Sulfuric acid		Yes 1000 LB	Yes 1000 LB	Yes
7732-18-5	Water		No	No	No
CAS #	Hazardous Cor	nponents (Chemical Name)	Other US EPA o	r State Lists	•
7664-93-9	Sulfuric acid		CAA HAP,ODC: Inventory; CA P	No; CWA NPDES: ROP.65: No	No; TSCA: Yes -
7732-18-5	Water		CAA HAP,ODC: Inventory; CA P	No; CWA NPDES: ROP.65: No	No; TSCA: Yes -
Regulatory Inf Statement:	ormation	This SDS was prepared in acc No.1272/2008.	ordance with 29 CFF	R 1910.1200 and Re	gulation (EC)
		Section 16. Ot	her Information	on	
Revision Date	:	12/03/2016			
Additional Info This Product:	ormation About	No data available.			
Company Poli	cy or Disclaimer:	DISCLAIMER: This information currently available to us. Howe express or implied, with respec use. Users should make their their particular purposes.	ever, we make no wa ct to such informatior	rranty of merchantak n, and we assume no	bility or any other warrant b liability resulting from its