

Revision: 04/21/2015 Supersedes Revision: 10/25/2006

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008						
Continue 1. Identification of the Contestance Minture and of the Conserve Minture 1.						
Section 1. Identification of the Substance/Mixture and of the Company/Undertaking						
.1 Product Code: 10009149 Product Name: Acid Phosphatase (control)						
.2 Relevant identified uses of the substance or mixture and uses advised against:						
<b>Relevant identified uses:</b> For research use only, not for human or veterinary 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						
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]:						
Respiratory Sensitization, Category 1						
.2 Label Elements:						
GHS Signal Word: Danger						
GHS Hazard Phrases:						
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.						
GHS Precaution Phrases:						
P261: Avoid breathing {dust/fume/gas/mist/vapors/spray}.						
P285: In case of inadequate ventilation wear respiratory protection.						
GHS Response Phrases:						
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P342+311: If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.						
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 allergy or asthma symptoms or breathing difficulties if inhaled.						
May cause eye, skin, or respiratory system irritation.						
To the best of our knowledge, the toxicological properties have not been thoroughly inv	restigated					



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		Sect	tion 3. Composition	/Information	on Ingredie	nts
RTECS # REACH Regis		Hazardous Components (Chemical Name)/ REACH Registration No.		Concentration	EC No./ EC Index No.	GHS Classification
		Phosphatase, acid		100.0 %	232-630-9 NA	Resp. Sens. 1: H334
		•		•		•
			Section 4. Fi	rst Aid Meas	ures	
4.1	Descrip	otion of First Aid	No data available.			
	Measur	es:				
	In Case	of Inhalation:	Remove to fresh air. If not bre Get immediate medical attent		al respiration or giv	ve oxygen by trained personnel.
	In Case	of Skin Contact:	Immediately wash skin with s clothing. Get medical attentio			5 minutes. Remove contaminated before reuse.
In Case of E		of Eye Contact:	Hold eyelids apart and flush e and tested by medical person		vater for at least 1	5 minutes. Have eyes examined
	In Case	of Ingestion:	Wash out mouth with water p unconscious person. Get mee medical personnel.	-	-	ive anything by mouth to an ng unless directed to do so by
			Section 5. Fire	Fighting Me	asures	
5.1	Suitabl	e Extinguishing	Use alcohol-resistant foam, c	carbon dioxide, wate	er, 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	Flamma Hazard	-	dNo data available.			
	Flash P	Pt:	No data.			
	Explos	ive Limits:	LEL: No data.	UEL: No d	ata.	
	Autoig	nition Pt:	No data.			
5.3	Fire Fig	phting Instructions	s: As in any fire, wear self-conta equivalent), and full protectiv	÷	-	
			Section 6. Acciden	tal Release	Measures	
6.1 6.2 6.3	Protect Emerge Enviror Precau Method	ency Procedures: nmental tions: Is and Material Fo	Avoid raising and breathing d As conditions warrant, wear and appropriate personal pro Take steps to avoid release r Contain spill and collect, as ngTransfer to a chemical waste	a NIOSH approved otection (rubber boo into the environmer appropriate.	self-contained bre ots, safety goggles nt, if safe to do so.	eathing apparatus, or respirator, s, and heavy rubber gloves).



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7 4	Section 7. Handling and Storage						
7.1	Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.						
<ul> <li>in Handling: Avoid prolonged or repeated exposure.</li> <li>7.2 Precautions To Be Taken Keep container tightly closed.</li> </ul>							
7.2			-			the product incort	
	in Storir	ng:	Store in accorda	nce with infor	mation listed on	the product insert.	
		Sect	ion 8. Exp	osure Co	ontrols/Pers	sonal Protection	
8.1	Exposur	e Parameters:					
CAS	#	Partial Chemical	Name	Britain	n EH40	France VL	Europe
900	1-77-8	Phosphatase, acio	ł	No data	1.	No data.	No data.
CAS #	#	Partial Chemical	Name	OSHA TWA	TWA	ACGIH TWA	Other Limits
900	1-77-8	Phosphatase, acio	1	No data	ì.	No data.	No data.
8.2	Exposur	e Controls:					
8.2.1	Enginee	ering Controls	Use process end	closures, local	l exhaust ventilat	tion, or other engineering	controls to control airbor
	(Ventilat	tion etc.):	levels below rec	ommended ex	xposure limits.		
3.2.2	Persona	al protection equip	oment:				
	Eye Pro	tection:	Safety glasses				
	Protecti	ve Gloves:	Compatible cher	nical-resistan	t gloves		
	Other P	rotective Clothing	:Lab coat				
		rotective Clothing tory Equipment	:Lab coat NIOSH approve	d respirator, a	s conditions war	rant.	
		tory Equipment		d respirator, a	is conditions war	rant.	
	Respira (Specify	tory Equipment	NIOSH approve	-	is conditions war	rant.	
	Respira (Specify	tory Equipment / Type): /gienic/Maintenan	NIOSH approve Do not take inter	nally.		rant. d be equipped with an eye	ewash and a safety shov
	Respira (Specify Work/Hy	tory Equipment / Type): /gienic/Maintenan	NIOSH approve Do not take inter	nally. or utilizing th	is material should		ewash and a safety shov
	Respira (Specify Work/Hy	tory Equipment / Type): /gienic/Maintenan	NIOSH approved Do not take inter Facilities storing	nally. or utilizing th / after handlin	is material should		ewash and a safety show
	Respira (Specify Work/Hy	tory Equipment / Type): /gienic/Maintenan tices:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl	nally. or utilizing th / after handlin e.	is material shoul ng.		ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment / Type): /gienic/Maintenan tices:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl	nally. or utilizing th after handlin e. hysical a	is material should	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment y Type): ygienic/Maintenan tices: So	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl	nally. or utilizing th after handlin e. hysical a	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment y Type): ygienic/Maintenan tices: So ion on Basic Phys	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic	nally. or utilizing thi after handlin e. hysical a cal Properties	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment y Type): ygienic/Maintenan tices: <u>So</u> ion on Basic Phys I States: ance and Odor:	NIOSH approver Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas	nally. or utilizing thi after handlin e. hysical a cal Properties	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment y Type): ygienic/Maintenan tices: So ion on Basic Phys I States: ance and Odor: Point:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde	nally. or utilizing thi after handlin e. hysical a cal Properties	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract	tory Equipment y Type): ygienic/Maintenan tices: Solon on Basic Phys I States: ance and Odor: Point: Point:	NIOSH approver Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data.	nally. or utilizing thi after handlin e. hysical a al Properties	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt	tory Equipment y Type): ygienic/Maintenan tices: Solon on Basic Phys I States: ance and Odor: Point: Point:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [ ] Gas A powde No data. No data.	nally. or utilizing thi after handlin e. hysical a al Properties	is material should ng. nd Chemic s	d be equipped with an ey	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt Evapora	tory Equipment y Type): ygienic/Maintenan tices: So ion on Basic Phys I States: ance and Odor: Point: Point: t:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data.	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an ey	ewash and a safety shov
9.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt Evapora Explosiv	tory Equipment 7 Type): ygienic/Maintenan tices: Solution on Basic Phys I States: ance and Odor: Point: Point: t: ation Rate:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data. No data. No data. LEL: No	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an eye	ewash and a safety shov
9.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt Evapora Explosiv	tory Equipment y Type): ygienic/Maintenan tices: So ion on Basic Phys I States: ance and Odor: Point: Point: t: ation Rate: ye Limits:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data. No data. No data. LEL: No	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an eye	ewash and a safety shov
9.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt Evapora Explosiv Vapor P Hg):	tory Equipment y Type): ygienic/Maintenan tices: So ion on Basic Phys I States: ance and Odor: Point: Point: t: ation Rate: ye Limits:	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data. LEL: No r mm No data.	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an eye	ewash and a safety show
9.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt Evapora Explosiv Vapor P Hg): Vapor D	tory Equipment 7 Type): ygienic/Maintenan tices: Solution on Basic Physic l States: ance and Odor: Point: Point: t: ation Rate: ve Limits: ressure (vs. Air of	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data. LEL: No r mm No data. ): No data.	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an eye	ewash and a safety shov
9.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt Evapora Explosiv Vapor P Hg): Vapor D Specific	tory Equipment 7 Type): ygienic/Maintenan tices: Solution on Basic Phys I States: ance and Odor: Point: Point: Point: t: ation Rate: ve Limits: Pressure (vs. Air of pensity (vs. Air = 1	NIOSH approve Do not take inter Facilities storing Wash thoroughly No data availabl ection 9. P sical and Chemic [] Gas A powde No data. No data. No data. LEL: No r mm No data. ): No data.	nally. or utilizing thi after handlin e. hysical a cal Properties [ ] Liquid r	is material should ng. nd Chemic s [ X ] Solid	d be equipped with an eye	ewash and a safety shov

Multi-region format



9.2	Other Inf	ormation							
	Percent	Volatile:	No data.						
			Section 10. Stability and	Reacti	vity				
10.1	Reactivit	iy:	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.						
	Polymer	ization:	Will occur [ ] Will not occur [ X ]						
10.4 Conditions To Avoid:			No data available.						
10.5									
To Avoid:									
10.6	Hazardo		No data available.						
	-	osition Or							
	Byprodu	cts:							
			Section 11. Toxicological						
11.1	Informat Toxicolo	ion on gical Effects:	The toxicological effects of this product ha	ive not beer	n thoroughly st	udied.			
CAS		- i	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
900	1-77-8	Phosphatase, aci	d	n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecological I	nformat	ion				
12.1	Toxicity		Avoid release into the environment.						
			Runoff from fire control or dilution water may cause pollution.						
12.2	Persiste	nce and	No data available.						
	Degrada	bility:							
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.						
	assessm	ient:							
12.6	Other ad	verse effects:	No data available.						
			Section 13. Disposal Cor	siderat	ions				
13.1	Waste D	isposal Method:	Dispose in accordance with local, state, a						
			Section 14. Transport I	nformat	ion				
14.1	LAND T	RANSPORT (US I	ООТ):						
	-	r Shipping Name:	Not dangerous goods.						
	OT Hazaro								
-	N/NA Nun								
14.1		RANSPORT (Euro							
		nipping Name:	Not dangerous goods.						
	N Number								
"	azaro Gia	55.							
						N	Iulti-region format		



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14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

e: Not dangerous goods.

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

ation:

### Section 15. Regulatory Information

CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
9001-77-8	Phosphatase, acid		No	No	No	
CAS #	Hazardous Components (Chemical Name)		Other US EPA or S	State Lists	•	
9001-77-8	Phosphatase, acid		CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No			
Regulatory Inf Statement:	ormation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Oth	er Information	า		
Revision Date:		04/21/2015				
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.				