

#### **SAFETY DATA SHEET** 96-Well Cover Sheet

Revision: 03/28/2017 Supersedes Revision: 02/12/2017

	CHEMICA	Ī			ç	Supersedes Revision: 02/12/2017			
		acco	rding to Regulation (EC) No. 190	)7/2006 as amended b	oy (EC) No. 1272/200	8			
		Section 1. Id	dentification of the Substar	nce/Mixture and of	the Company/Ur	ndertaking			
.1	Produc	t Code:	400012						
	Produc	et Name:	96-Well Cover Sheet						
.2	Releva	nt identified uses of	the substance or mixture a	and uses advised a	against:				
	Relev	ant identified uses:	For research use only, no	ot for human or vete	erinary use.				
.3	Details of the Supplier of the Safety Data Sheet:								
	Com	bany Name:	Cayman Chemical Comp	bany					
			1180 E. Ellsworth Rd. Ann Arbor, MI 48108						
	Web	site address:	www.caymanchem.com						
	Infor	mation:	Cayman Chemical Comp	bany	+1 (734	4)971-3335			
.4	Emerge	ency telephone num	ber:						
	Emer	gency Contact:	CHEMTREC Within USA	and Canada:	+1 (80	0)424-9300			
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887			
			Section 2. Haz	zards Identifi	cation				
.1	Classif	ication of the Substa	ance or Mixture:						
.2	Label E	Elements:							
	GHS	Signal Word:	None						
	GHS	Hazard Phrases:							
	Base	d on evaluation of cur	rently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.			
		Precaution Phrases	:						
		nrases apply.							
		Response Phrases:	ies:						
	-	nrases apply. Storage and Dispos	al Phracacu						
		•	or Storage and Section 13 for	Disposal informatio	מר				
.3			Material may be irritating to the	-		piratory tract.			
						,, ,			
	Ellecia	s and Symptoms:	May be harmful by inhalation	i, ingestion, or skin a	aboorption				
	Enect	<i>,</i> ,	May cause eye, skin, or resp		•				
	Ellect		May cause eye, skin, or resp	iratory system irrita	tion.	been thoroughly investigated			
			May cause eye, skin, or resp	iratory system irrita e, the toxicological p	tion. properties have not	been thoroughly investigated			
CAS		Secti	May cause eye, skin, or resp To the best of our knowledge On 3. Composition pnents (Chemical Name)/	iratory system irrita e, the toxicological p	tion. properties have not				
	#/	Secti Hazardous Compo	May cause eye, skin, or resp To the best of our knowledge On 3. Composition pnents (Chemical Name)/	iratory system irrita e, the toxicological p /Information	tion. properties have not On Ingredier EC No./	nts			



#### **SAFETY DATA SHEET** 96-Well Cover Sheet

Revision: 03/28/2017 Supersedes Revision: 02/12/2017

		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.
		a A solid water stream may be inefficient.
	Media:	
5.2	Flammable Properties an	dNo data available.
	Hazards:	No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	-	s: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or
5.5	File 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	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
<b></b> 7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
/	in Handling:	Avoid prolonged or repeated exposure.
7.2		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:	



#### SAFETY DATA SHEET **96-Well Cover Sheet**

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 equip	pment:
	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.
	<u> </u>	action 0. Dhysical and Chamical Dranartics
		ection 9. Physical and Chemical Properties
9.1	Information on Basic Phys	sical and Chemical Properties
	Physical States:	[]Gas []Liquid [X]Solid
	Appearance and Odor:	96-Well Cover Sheet
	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	r 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 Temperat	
	Viscosity:	No data.
9 2	Other Information	
9.2	Percent Volatile:	No data.
	Percent volatile:	
		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.



#### **SAFETY DATA SHEET** 96-Well Cover Sheet

Revision: 03/28/2017 Supersedes Revision: 02/12/2017

	=	osition or						
	Byprodu	cts:						
			Section 11. Toxico	logical Infori	mation			
11.1	Informat	ion on	The toxicological effects of this	product have not b	een thoroughly stu	idied.		
	Toxicolo	gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
	NA 96-Well Cover Sheet		neet	n.a.	n.a.	n.a.	n.a.	
			Section 12. Ecolo	ogical Inform	ation			
12.1	Toxicity	:	Avoid release into the environn	nent.				
			Runoff from fire control or dilution water may cause pollution.					
12.2	12.2 Persistence 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	nent:						
12.6	Other ad	verse effects:	No data available.					
			Section 13. Dispo	sal Consider	ations			
13.1	Waste D	isposal Method:	Dispose in accordance with loc	al, state, and feder	al regulations.			
			Section 14. Trar	sport Inform	ation			
14.1	LAND T	RANSPORT (US I	DOT):					
D	OT Prope	r Shipping Name:	Not dangerous goods.					
D	OT Hazar	d Class:						
U	N/NA Nun	nber:						
14.1	LAND T	RANSPORT (Euro	opean ADR/RID):					
Α	DR/RID S	nipping Name:	Not dangerous goods.					
U	N Number	r:						
н	azard Cla	SS:						
14.3	AIR TRA	ANSPORT (ICAO/I	ATA):					
IC	CAO/IATA	Shipping Name:	Not dangerous goods.					
	ional Trar	nsport	Transport in accordance with le	ocal, state, and fede	eral regulations.			
Infor	mation:							
			Section 15. Regu	latory Inform	ation			
		- 	ents and Reauthorization Act	-				
CAS			ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ		3 (TRI)	
	NA	96-Well Cover Sh		No	No	No		
CAS			ponents (Chemical Name)	Other US EPA of				
	NA	96-Well Cover Sh	leet	CAA HAP,ODC PROP.65: No	: No; CWA NPDE	S: No; TSCA:	No; CA	
							_	
1								
						N	Iulti-region format	



#### **SAFETY DATA SHEET** 96-Well Cover Sheet

Page: 5 of 5

Regulatory Information Statement:	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.
	Section 16. Other Information
Revision Date:	03/28/2017
Additional Information About This Product:	No data available.
This Product: Company Policy or Disclaimer:	DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warrantly of merchantability or any other warrantly, 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: 01/30/2017 Supersedes Revision: 08/01/2016

						•	
		acco	rding to Regulation (EC) No. 190	07/2006 as amended b	y (EC) No. 1272/200	8	
		Section 1. Ic	dentification of the Substar	nce/Mixture and of	the Company/U	ndertaking	
1.1	Produc	ct Code:	400046				
	Produc	ct Name:	96 Well Kit Box				
.2	Releva	nt identified uses of	the substance or mixture a	and uses advised a	igainst:		
	Relev	ant identified uses:	For research use only, n	ot for human or vete	erinary use.		
.3	Details	of the Supplier of th	ne Safety Data Sheet:				
	Com	pany Name:	Cayman Chemical Comp	pany			
			1180 E. Ellsworth Rd. Ann Arbor, MI 48108				
	Web	site address:	www.caymanchem.com				
	Infor	mation:	Cayman Chemical Com		+1 (734	4)971-3335	
.4	Emerg	ency telephone num	ber:				
	Emer	gency Contact:	CHEMTREC Within USA	A and Canada:	+1 (80	0)424-9300	
			CHEMTREC Outside US	SA and Canada:	+1 (70	3)527-3887	
_			Section 2. Ha	zards Identifi	cation		
2.1	Classif	ication of the Substa	ance or Mixture:				
2.2	Label E	Elements:					
	GHS	Signal Word:	None				
		Hazard Phrases:					
	Base	d on evaluation of cur	rently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	GHS	<b>Precaution Phrases</b>	:				
	No pl	hrases apply.					
	GHS	Response Phrases:					
	-	hrases apply.					
		Storage and Dispos					
			or Storage and Section 13 for	r Disposal informatic			
	Adverse Human Health Material may be irritating to the mucous membranes and upper respiratory tract.						
2.3						piratory tract.	
2.3		s and Symptoms:	May be harmful by inhalation	n, ingestion, or skin a	absorption.	piratory tract.	
2.3		s and Symptoms:	May be harmful by inhalation May cause eye, skin, or resp	n, ingestion, or skin a piratory system irritat	absorption. tion.	piratory tract. been thoroughly investigated	
2.3		s and Symptoms:	May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge	n, ingestion, or skin a biratory system irritat e, the toxicological p	absorption. tion. roperties have not	been thoroughly investigated	
2.3	Effects	s and Symptoms: Sectio	May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge on 3. Composition	n, ingestion, or skin a biratory system irritat e, the toxicological p n/Information	absorption. tion. roperties have not on Ingredie	been thoroughly investigated	
CAS	Effects	s and Symptoms: Section Hazardous Compo	May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge On 3. Composition onents (Chemical Name)/	n, ingestion, or skin a biratory system irritat e, the toxicological p	absorption. tion. roperties have not	been thoroughly investigated	
CAS	Effects	s and Symptoms: Sectio	May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge On 3. Composition onents (Chemical Name)/	n, ingestion, or skin a biratory system irritat e, the toxicological p n/Information	absorption. tion. roperties have not On Ingredie EC No./	been thoroughly investigated	



Revision: 01/30/2017 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	a A solid water stream may be inefficient.
	Media:	
5.2	Flammable Properties an	dNo data available.
	Hazards:	
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data. No data.
5.2	Autoignition Pt:	
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.
		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	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	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:	



Revision: 01/30/2017 Supersedes Revision: 08/01/2016

8.2	Exposure Controls:			
8.2.1	Engineering Controls	Use prod	cess enclosures, local exhaust ventilation, or other engineering controls to con	trol airborne
	(Ventilation etc.):	levels be	elow recommended exposure limits.	
8.2.2	Personal protection equi	oment:		
	Eye Protection:	Safety g	lasses	
	Protective Gloves:		ble chemical-resistant gloves	
	Other Protective Clothing	-		
			approved respirator, as conditions warrant.	
	(Specify Type):	NICOIT		
	Work/Hygienic/Maintenan	Do not t	ake internally	
	ce Practices:	Facilities	storing or utilizing this material should be equipped with an eyewash and a sa	afety shower.
			oroughly after handling.	
		No data	available.	
	S	ection	9. Physical and Chemical Properties	
9.1	Information on Basic Phys		-	
	Physical States:	[	] Gas [] Liquid [X] Solid	
	Appearance and Odor:	ç	6 Well Kit Box	
	pH:	١	lo data.	
	Melting Point:	١	lo data.	
	Boiling Point:	١	lo data.	
	Flash Pt:	١	lo data.	
	Evaporation Rate:	١	lo data.	
	Flammability (solid, gas):	Ν	lo data available.	
	Explosive Limits:	L	EL: No data. UEL: No data.	
	Vapor Pressure (vs. Air o	rmm N	lo data.	
	Hg):			
	Vapor Density (vs. Air = 1	): 1	lo data.	
	Specific Gravity (Water =	1): N	lo data.	
	Solubility in Water:	١	lo data.	
	<b>Octanol/Water Partition</b>	١	lo data.	
	Coefficient:			
	Autoignition Pt:	١	lo data.	
	Decomposition Temperat	ure: N	lo data.	
	Viscosity:	١	lo data.	
9.2	Other Information			
	Percent Volatile:	١	lo data.	
		Se	ction 10. Stability and Reactivity	
10.1	Reactivity:	No data	available.	
10.2	Stability:	Unstable	e [ ] Stable [ X ]	
10.3	Stability Note(s):	Stable if	stored in accordance with information listed on the product insert.	
	Polymerization:	Will occu	ır [ ] Will not occur [ X ]	
10.4	Conditions To Avoid:	No data	available.	
10.5	Incompatibility - Materials	s No data	available.	
1	To Avoid:			
10.6	Hazardous	No data	available.	
1			Multi-	region format



Revision: 01/30/2017 Supersedes Revision: 08/01/2016

Decomposition or **Byproducts:** Section 11. Toxicological Information 11.1 Information on The toxicological effects of this product have not been thoroughly studied. **Toxicological Effects:** CAS # Hazardous Components (Chemical Name) NTP IARC ACGIH OSHA NA 96 Well Kit Box n.a. n.a. n.a. n.a. Section 12. Ecological Information 12.1 **Toxicity:** Avoid release into the environment. Runoff from fire control or dilution water may cause pollution. 12.2 Persistence and No data available. **Degradability:** Bioaccumulative No data available. 12.3 Potential: 12.4 Mobility in Soil: No data available. Results of PBT and vPvB No data available. 12.5 assessment: No data available. 12.6 Other adverse effects: Section 13. Disposal Considerations Dispose in accordance with local, state, and federal regulations. 13.1 Waste Disposal Method: Section 14. Transport Information 14.1 LAND TRANSPORT (US DOT): Not dangerous goods. **DOT Proper Shipping Name: DOT Hazard Class: UN/NA Number:** 14.1 LAND TRANSPORT (European ADR/RID): Not dangerous goods. ADR/RID Shipping Name: **UN Number:** Hazard Class: 14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: Not dangerous goods. Additional Transport Transport in accordance with local, state, and federal regulations. Information: Section 15. Regulatory Information EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI) NA 96 Well Kit Box No No No CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists NA 96 Well Kit Box CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No Multi-region format



Page: 5 of 5

CHEMICAL	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:	01/30/2017
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.

# **Product Information**



A Safety Data Sheet (SDS) on this material is not required as it is non-hazardous. However, we do recommend the following minimum precautions when using this item:

- Store at correct temperature.
- Dispose of by in accordance with federal, state, and local regulations.
- Wash thoroughly after handling.

#### WARNING:

This product is not intended or approved for human or veterinary use.

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

Copyright Cayman Chemical Company

#### **Cayman Chemical**

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

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

**Fax** (734) 971-3640

E-Mail custserv@caymanchem.com

Web www.caymanchem.com



Revision: 03/22/2017 Supersedes Revision: 11/13/2015

		diag to Degulation (EC) No. 4007/2000 on emand	ad by (EQ) Na (1070/000	20
		rding to Regulation (EC) No. 1907/2006 as amend		
	Section 1. Ic	lentification of the Substance/Mixture and	of the Company/U	ndertaking
.1	Product Code: Product Name:	700001 DMSO Assay Reagent		
.2	Relevant identified uses of	the substance or mixture and uses advise	ed against:	
	Relevant identified uses:	For research use only, not for human or	veterinary use.	
1.3	Details of the Supplier of th	e Safety Data Sheet:		
	Company Name:	Cayman Chemical Company 1180 E. Ellsworth Rd. Ann Arbor, MI 48108		
	Web site address:	www.caymanchem.com		
	Information:	Cayman Chemical Company	+1 (73	4)971-3335
.4	Emergency telephone num	ber:		
	Emergency Contact:	CHEMTREC Within USA and Canada:		0)424-9300
		CHEMTREC Outside USA and Canada:	+1 (70	3)527-3887
		Section 2. Hazards Iden	tification	
2.1	Classification of the Substa	ince or Mixture:		
	Flammable Liquids, Cate	gory 4		
2.2	Label Elements:			
2.2	Label Elements: GHS Signal Word: GHS Hazard Phrases:	Warning		
2.2	GHS Signal Word:	Warning		
2.2	GHS Signal Word: GHS Hazard Phrases:	-		
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases P210: Keep away from {he	at/sparks/open flames/hot surfaces} No sm	-	
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases P210: Keep away from {he P280: Wear {protective glo		-	
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases:	at/sparks/open flames/hot surfaces} No sm	-	
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply.	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr	-	
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases:	otection}.	
2.2	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin.	otection}. ation. als or materials of unk	
	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin. Material may be irritating to the mucous merr	otection}. ation. als or materials of unk	
	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin. Material may be irritating to the mucous merr May be harmful by inhalation, ingestion, or sl	otection}. ation. als or materials of unk branes and upper res	
	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin. Material may be irritating to the mucous mem May be harmful by inhalation, ingestion, or sh	otection}. ation. als or materials of unk abranes and upper res kin absorption. ritation.	spiratory tract.
	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin. Material may be irritating to the mucous merr May be harmful by inhalation, ingestion, or sl	otection}. ation. als or materials of unk abranes and upper res kin absorption. ritation. al properties have not	spiratory tract. t been thoroughly investigated.
2.3	GHS Signal Word: GHS Hazard Phrases: H227: Combustible liquid. GHS Precaution Phrases: P210: Keep away from {he P280: Wear {protective glo GHS Response Phrases: No phrases apply. GHS Storage and Dispos Please refer to Section 7 fo Adverse Human Health Effects and Symptoms:	at/sparks/open flames/hot surfaces} No sm ves/protective clothing/eye protection/face pr al Phrases: r Storage and Section 13 for Disposal inform DMSO has the potential to carry toxic materia DMSO is readily absorbed through skin. Material may be irritating to the mucous mem May be harmful by inhalation, ingestion, or sk May cause eye, skin, or respiratory system ir To the best of our knowledge, the toxicologic Dn 3. Composition/Informatic ments (Chemical Name)/	otection}. ation. als or materials of unk abranes and upper res kin absorption. ritation. al properties have not on on Ingredie	spiratory tract. t been thoroughly investigated.



Revision: 03/22/2017 Supersedes Revision: 11/13/2015

-		
		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 contaminate
		clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
	In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an
		unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by
		medical personnel.
4.2	Important Symptoms and	Exposure may cause: hematuria or shortness of breath (dyspnea).
	Effects, Both Acute and	Exposure may cause: gastrointestinal irritation with nausea, vomiting, diarrhea, headache,
	Delayed:	dizziness, and drowsiness.
		Eye contact may cause blurry vision, burning sensation, redness, tearing, and vasodilation.
		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:	A solid water stream may be inefficient.
5.2	Flammable Properties an	dCan release vapors that form explosive mixtures at temperatures at or above the flashpoint.
	Hazards:	Container explosion may occur under fire conditions.
		Emits toxic fumes under fire conditions.
		Sensitive to static discharge.
		Vapors can travel to a source of ignition and flash back.
		No data available.
	Flash Pt:	89.00 C Method Used: Closed Cup
	Explosive Limits:	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C
	Autoignition Pt:	215.00 C
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.
		Note: Combustible as diluted in dimethyl sulfoxide.
		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	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	ng Transfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	



Revision: 03/22/2017 Supersedes Revision: 11/13/2015

		Supersedes Revision: 11/13/2015					
		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.					
	5	Keep away from sources of ignition.					
		Take precautionary measures against static discharge.					
7.2	Precautions To Be Taken	Keep away from heat, sparks and flame.					
	in Storing:	Keep container tightly closed.					
	-	Store in accordance with information listed on the product insert.					
	Other Precautions:	Hygroscopic.					
	Sect	ion 8. Exposure Controls/Personal Protection					
3.1	Exposure Parameters:						
8.2	Exposure Controls:						
8.2.1	Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborn					
	(Ventilation etc.):	levels below recommended exposure limits.					
8.2.2	Personal protection equip	oment:					
	Eye Protection:	Safety glasses					
	Protective Gloves:	Compatible chemical-resistant gloves					
	Other Protective Clothing	:Lab coat					
	<b>Respiratory Equipment</b>	NIOSH approved respirator, as conditions warrant.					
	(Specify Type):						
	Work/Hygienic/Maintenan	Work/Hygienic/Maintenan Do not take internally.					
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety					
		shower.					
		Wash thoroughly after handling.					
		No data available.					
	S	ection 9. Physical and Chemical Properties					
<b>9</b> .1		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:	89.00 C Method Used: Closed Cup					
	Evaporation Rate:	No data.					
	Flammability (solid, gas):	No data available.					
	i iaininability (Solid, gas).						
	Explosive Limits:	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C					
		LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C					
	Explosive Limits:	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C					
	Explosive Limits: Vapor Pressure (vs. Air o	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C rmm 0.37 MM_HG at 20.0 C					
	Explosive Limits: Vapor Pressure (vs. Air of Hg): Vapor Density (vs. Air = 1	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C rmm 0.37 MM_HG at 20.0 C ): No data.					
	Explosive Limits: Vapor Pressure (vs. Air of Hg): Vapor Density (vs. Air = 1 Specific Gravity (Water =	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C rmm 0.37 MM_HG at 20.0 C ): No data.					
	Explosive Limits: Vapor Pressure (vs. Air of Hg): Vapor Density (vs. Air = 1	LEL: 3.5% at 25.0 C UEL: 42.0% at 25.0 C r mm 0.37 MM_HG at 20.0 C ): No data. 1): No data.					

# SAFETY DATA SHEET **DMSO** Assay Reagent

ayn	nan			Su		ion: 03/22/2017 ion: 11/13/2015
A	Autoignition Pt:	215.00 C			•	
С	Decomposition Temperat	ure: No data.				
	/iscosity:	No data.				
	) ther Information					
	Percent Volatile:	No data.				
N	Molecular Formula & Weig					
		Section 10. Stability an	d Reacti	vity		
	Reactivity:	No data available.				
	Stability:	Unstable [ ] Stable [ X ]				
0.3 S	Stability Note(s):	Stable if stored in accordance with inform	nation listed of	on the product i	nsert.	
P	Polymerization:	Will occur [ ] Will not occur [ X ]				
0.4 C	Conditions To Avoid:	heat, flames and sparks				
0.5 lı	ncompatibility - Materials	acid chlorides				
т	Γο Avoid:	phosphorus halides				
		strong acids				
		alkali metals				
		strong oxidizing agents				
		strong reducing agents				
10.6 H	Hazardous	carbon monoxide				
C	Decomposition or	carbon dioxide				
Byproducts:		sulfur oxides				
		Section 11. Toxicologica	I Informa	ation		
1.1 lı	nformation on	The toxicological effects of this product I	nave not beer	n thoroughly stu	ıdied.	
т	Foxicological Effects:	DMSO - Toxicity Data: Oral LD50 (rat):	4,500 mg/kg	; Skin LD50 (rat	t): 40,000 mg/	kg; Oral LD50
	<b>C</b>	(mouse): 7,920 mg/kg; Skin LD50 (mous	se): 50,000 m	g/kg; Skin TDL	O (woman): 1	,800 mg/kg;
		Inhalation LC50 (rat): >1,600 mg/m3 (4h	);			
		DMSO - Irritation Data: Eyes (rabbit): 10	0 mg mild; Sl	kin (rabbit): 500	mg (24h) mile	d;
c	Chronic Toxicological	DMSO - Investigated as a mutagen, rep	roductive effe	ctor, and tumor	igen.	
E	Effects:	Only select Registry of Toxic Effects of C	Chemical Sub	stances (RTEC	S) data is pre	sented here.
		See actual entry in RTECS for complete	information.			
		DMSO RTECS Number: PV6210000				
Carcino	genicity:	NTP? No IARC Monographs? No	OSHA Re	egulated? No		
CAS #	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA
67-68	8-5 Dimethyl sulfoxide	e, anhydrous	n.a.	n.a.	n.a.	n.a.
	4	Section 12. Ecological	Informat	ion	ł	ł
2.1 T	Foxicity:	Avoid release into the environment.				
		Runoff from fire control or dilution water	may cause p	ollution.		
12.2 P	Persistence and	No data available.	,			
	Degradability:					
	Bioaccumulative	No data available.				
	Potential:					
P		No data available				
	Nobility in Soil:	No data available.				
	Results of PBT and vPvB	No data available.				
12.5 R	Results of PBT and vPvB assessment:	No data available.				
12.5 R a		No data available. No data available.				



Revision: 03/22/2017 Supersedes Revision: 11/13/2015

				Supersec		
		Section 13. Dispos	sal Considerat	ions		
13.1 Waste D	Disposal Method:	Dispose in accordance with loca	al, state, and federal re	egulations.		
		Section 14. Tran	sport Informat	ion		
14.1 LAND T	RANSPORT (US	DOT):				
DOT Prope	er Shipping Name	: Combustible liquid, n.o.s. (I	Dimethyl sulfoxide)			
DOT Hazar						
UN/NA Nur		NA1993	Packing Grou	p:	III	
	RANSPORT (Eur					
	hipping Name:	Not dangerous goods.				
UN Numbe Hazard Cla		1993	Packing Grou	p:	III	
	ANSPORT (ICAO/	1474).				
	Shipping Name:	Not dangerous goods.				
Additional Tra		Transport in accordance with lo	cal state and federal	regulations		
Information:	nsport	When sold in quantities of less		-	oted Quantity Code of	
		E1, E2, E4, or E5, this item me	-	-	-	
		Therefore packaging does not h	nave to be labeled as	Dangerous Goods/E	cepted Quantity.	
		Section 15. Regul	atory Informat	ion		
EPA SARA (Sı	uperfund Amendn	nents and Reauthorization Act	of 1986) Lists			
CAS #	Hazardous Com	ponents (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313			S. 313 (TRI)	
67-68-5	Dimethyl sulfoxic	le, anhydrous	No	No	No	
CAS #	Hazardous Com	aponents (Chemical Name) Other US EPA or State Lists				
67-68-5	Dimethyl sulfoxic	le, anhydrous	CAA HAP,ODC: No Inventory; CA PRO	o; CWA NPDES: No DP.65: No	TSCA: Yes -	
Regulatory Info	ormation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC)				
Statement:		No.1272/2008.				
		Section 16. Oth	ner Informatior	ו		
Revision Date:		03/22/2017				
Additional Info This Product:	rmation About	No data available.				
<b>•</b> • • • •	y or Disclaimer:	DISCLAIMER: This information currently available to us. However		•		



Revision: 03/22/2017 Supersedes Revision: 03/18/2015

	CHEMICAL					Supersedes Revision: 03/18/2015
			ling to Regulation (EC) No. 190	-		
		Section 1. Ide	entification of the Substar	nce/Mixture and of	the Company/Ur	ndertaking
1.1	Product Product Synony	t Name:	700002 ADHP Assay Reagent 1-(3,7-dihydroxy-10H-phe	enoxazin-10-yl)-etha	none; A 6550; AD	0HP; Amplex Red®;
1.2			he substance or mixture a			
	Releva	ant identified uses:	For research use only, no	ot for human or veter	rinary use.	
1.3		of the Supplier of the any Name:	e Safety Data Sheet: Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	pany		
	Web s	site address:	www.caymanchem.com			
	Inform	nation:	Cayman Chemical Comp	pany	+1 (734	4)971-3335
1.4	-	ncy telephone numb gency Contact:	er: CHEMTREC Within USA CHEMTREC Outside US			0)424-9300 3)527-3887
			Section 2. Haz	zards Identific	cation	
2.1		cation of the Substa Toxicity: Oral, Cate				
2.2		lements:	JOI Y 4			
	GHS I	<b>Signal Word:</b> Hazard Phrases: Harmful if swallowed.	Warning			
	P264: <b>GHS I</b> P301+		nly after handling. D: Call a POISON CENTER	or doctor/physician	if you feel unwell.	
2.2	GHS S		I Phrases: Storage and Section 13 for armful if swallowed.	Disposal information	n.	
2.3		and Symptoms: M M M	laterial may be irritating to the lay be harmful by inhalation lay cause eye, skin, or resp	or skin absorption. iratory system irritati	ion.	piratory tract.
		Sectio	n 3. Composition	/Information	on Ingredie	nts
CAS RTE	#/ CS #	Hazardous Compor REACH Registratio	nents (Chemical Name)/ n No.	Concentration	EC No./ EC Index No.	GHS Classification



Revision: 03/22/2017 Supersedes Revision: 03/18/2015

		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 Extinguishinç	A solid water stream may be inefficient.
	Media:	
5.2	Flammable Properties an	dNo 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	<b>s:</b> 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	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	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:	



Revision: 03/22/2017 Supersedes Revision: 03/18/2015

8.2	Exposure Controls:	
8.2.1	Engineering Controls	Jse process enclosures, local exhaust ventilation, or other engineering controls to control airborne
	(Ventilation etc.):	evels below recommended exposure limits.
8.2.2	Personal protection equipm	ient:
	Eye Protection: S	Safety glasses
	Protective Gloves: C	Compatible chemical-resistant gloves
	Other Protective Clothing:L	ab coat
	Respiratory Equipment N	IIOSH approved respirator, as conditions warrant.
	(Specify Type):	
	Work/Hygienic/Maintenan D	Do not take internally.
	ce Practices: F	acilities storing or utilizing this material should be equipped with an eyewash and a safety shower
	V	Vash thoroughly after handling.
	Ν	lo data available.
	So	ction 9. Physical and Chemical Properties
		· · ·
9.1	Information on Basic Physic	-
	Physical States:	[]Gas []Liquid [X]Solid
	Appearance and Odor:	A powder
	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 n	nm No data.
	Hg):	
	Vapor Density (vs. Air = 1):	No data.
	Specific Gravity (Water = 1)	
	Solubility in Water:	No data.
	Solubility Notes:	~0.15 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2); ~1.5 mg/ml in EtOH; ~25 mg/ml in DMSO & DMF;
	Octanol/Water Partition	No data.
	Coefficient:	
	Autoignition Pt:	No data.
	Decomposition Temperatur	e: No data.
	Viscosity:	No data.
9.2	Other Information	
	Percent Volatile:	No data.
	Molecular Formula & Weigh	nt: C14H11NO4 257.2
1		



Multi-region format

Revision: 03/22/2017 Supersedes Revision: 03/18/2015

					S	upersedes Revis	sion: 03/18/20		
			Section 10. Stability an	d Reacti	vity				
10.1	Reactivit	ty:	No data available.						
10.2	Stability	:	Unstable [ ] Stable [ X ]						
10.3	Stability Note(s):		Stable if stored in accordance with inform	mation listed of	on the product	insert.			
	Polymer	ization:	Will occur [ ] Will not occur [ X ]						
10.4	Conditio	ons To Avoid:	No data available.						
10.5	Incompa	tibility - Materials	s strong oxidizing agents						
	To Avoid	d:							
10.6	Hazardo	us	carbon dioxide						
	Decomp	osition or	carbon monoxide						
	Byprodu	icts:	nitrogen oxides						
			Section 11. Toxicologica	al Informa	ation				
11.1	Informat	ion on	The toxicological effects of this product	have not beer	n thoroughly st	tudied.			
	Toxicolo	gical Effects:							
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
1191	71-73-2	10-Acetyl-3,7-dih	ydroxyphenoxazine (ADHP)	n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecological	Informat	ion		·		
12.1	Toxicity:	:	Avoid release into the environment.						
			Runoff from fire control or dilution water	may cause p	ollution.				
12.2	Persiste	nce and	No data available.						
	Degrada	bility:							
12.3	Bioaccu	mulative	No data available.						
	Potentia	I:							
12.4	Mobility	in Soil:	No data available.						
12.5	Results	of PBT and vPvB	No data available.						
	assessm	nent:							
12.6	Other ad	lverse effects:	No data available.						
			Section 13. Disposal Co	onsiderat	ions				
13.1	Waste D	isposal Method:	Dispose in accordance with local, state,	and federal re	egulations.				
			Section 14. Transport	Informat	ion				
14.1	LAND T	RANSPORT (US I	DOT):						
D	OT Prope	r Shipping Name:	Not dangerous goods.						
D	OT Hazaro	d Class:							
U	N/NA Nun	nber:							
14.1	LAND T	RANSPORT (Euro	opean ADR/RID):						
Α	DR/RID SI	hipping Name:	Not dangerous goods.						
U	N Numbei	r:							
H	azard Cla	SS:							
						_			



Revision: 03/22/2017 Supersedes Revision: 03/18/2015

14.3 AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

Not dangerous goods.

Additional Transport Information:  $\label{eq:constraint} Transport \ in \ accordance \ with \ local, \ state, \ and \ federal \ regulations.$ 

	Section 15. Regu	latory Informa	ation		
uperfund Amendr	nents and Reauthorization Act	of 1986) Lists			
Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
119171-73-2 10-Acetyl-3,7-dihydroxyphenoxazine (		No	No	No	
CAS # Hazardous Components (Chemical Name)		Other US EPA or	State Lists		
119171-73-2 10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)		CAA HAP,ODC: I PROP.65: No	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No		
ormation	This SDS was prepared in acc	ordance with 29 CFR	1910.1200 and Re	egulation (EC)	
	No.1272/2008.				
	Section 16. Ot	her Informatio	n		
	03/22/2017				
rmation About	No data available.				
cy or Disclaimer:	currently available to us. Howe express or implied, with respec	ver, we make no war t to such information	ranty of merchanta , and we assume n	bility or any other warranty, o liability resulting from its	
	Hazardous Com 10-Acetyl-3,7-dir Hazardous Com 10-Acetyl-3,7-dir ormation	Iperfund Amendments and Reauthorization Act         Hazardous Components (Chemical Name)         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)         Hazardous Components (Chemical Name)         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)         ormation       This SDS was prepared in acc No.1272/2008.         Section 16. Ot         03/22/2017         rmation About       No data available.         cy or Disclaimer:       DISCLAIMER: This information currently available to us. Howe express or implied, with respect use. Users should make their	aperfund Amendments and Reauthorization Act of 1986) Lists         Hazardous Components (Chemical Name)       S. 302 (EHS)         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       No         Hazardous Components (Chemical Name)       Other US EPA or         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       No         Hazardous Components (Chemical Name)       Other US EPA or         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       CAA HAP,ODC: IPROP.65: No         Promation       This SDS was prepared in accordance with 29 CFR No.1272/2008.         Section 16. Other Information       03/22/2017         rmation About       No data available.         cy or Disclaimer:       DISCLAIMER: This information is believed to be accurrently available to us. However, we make no war express or implied, with respect to such information use. Users should make their own investigations to	Hazardous Components (Chemical Name)       S. 302 (EHS)       S. 304 RQ         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       No       No         Hazardous Components (Chemical Name)       Other US EPA or State Lists         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       Other US EPA or State Lists         10-Acetyl-3,7-dihydroxyphenoxazine (ADHP)       CAA HAP,ODC: No; CWA NPDES: PROP.65: No         ormation       This SDS was prepared in accordance with 29 CFR 1910.1200 and Revolution No.1272/2008.         Section 16. Other Information         03/22/2017         rmation About       No data available.         Cy or Disclaimer:       DISCLAIMER: This information is believed to be accurate and represencurrently available to us. However, we make no warranty of merchanta express or implied, with respect to such information, and we assume nuse. Users should make their own investigations to determine the suit	



		Section 1.	Identification of the Substar	nce/Mixture and o	f the Company/U	ndertaking
.1	Product C		700012			
	Product N		HCI Assay Reagent (20)	mM)		
1.2	Relevant i	identified uses (	of the substance or mixture a	-	against:	
		t identified uses			-	
1.3			the Safety Data Sheet:			
	Compan	y Name:	Cayman Chemical Comp	any		
	Company	ly Humo.	1180 E. Ellsworth Rd. Ann Arbor, MI 48108	Juny		
	Web site	e address:	www.caymanchem.com			
	Informat	tion:	Cayman Chemical Comp	bany	+1 (73	4)971-3335
1.4	Emergend	y telephone nu	mber:			
	Emerger	ncy Contact:	CHEMTREC Within USA	and Canada:	+1 (80	00)424-9300
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887
			Section 2. Ha	zards Identif	ication	
2.1		tion of the Subs	stance or Mixture:			
2.2	Label Eler		n, Calegory S			
	-	Inal Word:	Warning			
		zard Phrases: auses mild skin i	rritation			
		ecaution Phrase				
		ses apply.	-3.			
	-	sponse Phrases	s.			
		-	n occurs, get medical advice/a	ttention.		
		orage and Dispo	-			
			for Storage and Section 13 for	Disposal informati	ion.	
2.3	Adverse	Human Health	Causes mild skin irritation.			
	Effects a	nd Symptoms:	Material may be irritating to t	he mucous membra	anes and upper re	spiratory tract.
			May be harmful by inhalation	-	absorption.	
			May cause eye or respiratory	-	nunnution hours no	
		Sec	tion 3. Composition	-		t been thoroughly investigate
CAS	#/ F		ponents (Chemical Name)/	Concentration		GHS Classification
		REACH Registra			EC Index No.	
764	I7-01-0 ⊢	lydrochloric acid		0.17 %	231-595-7	Comp. Gas: H280
	025000				017-002-00-2	Skin Corr. 1A: H314 Acute Tox.(I) 3: H331
MVV4		Vater		99.83 %	231-791-2	No data available.
773	32-18-5 V 10000				NA	



			Section 4	4. First Aid Measur	es	
4.1	Descrip	tion of First Aid				
	Measur	es:				
	In Case	of Inhalation:	Remove to fresh air. I Get immediate medica	f not breathing, give artificial re al attention.	espiration or give oxygen by	trained personnel.
	In Case	of Skin Contact:	-	n with soap and plenty of wate attention if symptoms occur. V		move contaminated
	In Case	of Eye Contact:	-	d flush eyes with plenty of wate	-	ave eyes examined
	In Case	of Ingestion:	Wash out mouth with	water provided person is cons Get medical attention. Do NOT		-
			medical personnel.			
			Section 5.	Fire Fighting Meas	sures	
5.1	Suitable	e Extinguishing	Use alcohol-resistant	foam, carbon dioxide, water, o	or dry chemical spray.	
	Media:		Use water spray to co	ool fire-exposed containers.		
	Unsuita	ble Extinguishind	A solid water stream	may be inefficient.		
	Media:	0 0				
5.2	Flamma	able Properties an	dNo data available.			
	Hazard	-				
			No data available.			
	Flash P	t:	No data.			
	Explosi	ve Limits:	LEL: No data.	UEL: No data		
	-	nition Pt:	No data.			
5.3	-		-	elf-contained breathing appara		SH approved or
			equivalent), and full p	protective gear to prevent conta	act with skin and eyes.	
			Section 6. Ac	cidental Release M	easures	
6.1	Protect	ive Precautions,	Avoid breathing vapo	ors and provide adequate vent	ilation.	
	Protect	ive Equipment an		nt, wear a NIOSH approved se		-
	Emerge	ency Procedures:	and appropriate pers	sonal protection (rubber boots,	safety goggles, and heavy r	ubber gloves).
6.2	Enviror	mental	Take steps to avoid r	release into the environment, i	f safe to do so.	
	Precaut	tions:				
6.3	Method	s and Material Fo	r Contain spill and coll	lect, as appropriate.		
	Contair	ment and Cleanir	ngTransfer to a chemic	al waste container for disposa	I in accordance with local re	gulations.
	Up:					
			Section 7.	Handling and Stor	age	
7.1	Precaut	tions To Be Taken	Avoid breathing dust/	fume/gas/mist/vapours/spray.		
	in Hand	lling:	Avoid prolonged or re	epeated exposure.		
7.2	Precaut	tions To Be Taken	Keep container tightly	/ closed.		
	in Stori			with information listed on the p	roduct insert.	
		Sec	tion 8. Exposu	re Controls/Person	al Protection	
8.1	Exposu	re Parameters:				
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe
764	7-01-0	Hydrochloric acid		TWA: 2 mg/m3 (1 ppm) STEL: 8 mg/m3 (5 ppm)	STEL: 7.6 mg/m3 (5 ppm)	TWA: 8 mg/m3 STEL: 15 mg/m3 Multi-region forma



773	2-18-5	Water		No data.	No data.	No data.
CAS	#	Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits
764	7-01-0	Hydrochloric acid		CEIL: 5 ppm	CEIL: 2 ppm	No data.
773	2-18-5	Water		No data.	No data.	No data.
8.2		re Controls:				
8.2.1	Enginee (Ventila	ering Controls tion etc.): al protection equi	levels below recommo	res, local exhaust venti ended exposure limits.	lation, or other engineering co	ntrols to control airbor
		tection:	Safety glasses			
	-	ive Gloves:	Compatible chemical-	resistant gloves		
		rotective Clothing	-	gioreo		
		tory Equipment		pirator, as conditions w	arrant.	
	Work/H	ygienic/Maintenar	Do not take internally			
	ce Prac	tices:	Facilities storing or ut Wash thoroughly afte	-	uld be equipped with an eyew	ash and a safety show
			No data available.			
		S	ection 9. Phys	ical and Chem	ical Properties	
9.1	Informat		sical and Chemical Pr			
		Il States:		X]Liquid []Solid		
	-	ance and Odor:	Solution	1 1 1 1 1 1 1 1 1 1		
	Melting		No data.			
	Boiling	Point:	No data.			
	Flash P	t:	No data.			
	Evapora	ation Rate:	No data.			
	Flamma	bility (solid, gas):	No data availa	ible.		
	Explosi	ve Limits:	LEL: No data		UEL: No data.	
	Vapor P Hg):	Pressure (vs. Air o	<b>r mm</b> No data.			
		ensity (vs. Air = 1	): No data.			
	Specific	Gravity (Water =	1): No data.			
	•	ty in Water:	No data.			
		ition Pt:	No data.			
9.2	-	formation				
		Volatile:	No data.			
			Section 10	. Stability and I	Reactivity	
10.4	Describ	14			Cachivity	
10.1 10.2	Reactiv Stability	-	No data available. Unstable [ ] Stal	ble [ X ]		
10.2	-	/: / Note(s):			on listed on the product insert.	
	-	rization:		Il not occur [ X ]		
10.4	-	ons To Avoid:	No data available.			
10.5	Incomp	atibility - Materials	No data available.			
	To Avoi					
10.6	Hazardo		No data available.			
	Decom	position or				
						Multi-region for



			Section	n 11. Toxicologica	al Informa	ation		
11.1		ogical Effects: Toxicological	The toxicolog Acetic acid - ppm/30M; Inf Acetic acid - Only select F	gical effects of this compour Toxicity Data: Oral LD50 (ra halation LC50 (mouse): 830 Investigated as a tumoriger Registry of Toxic Effects of 0 ntry in RTECS for complete	nd have not b abbit): 900 m 00 mg/m3/30N n, mutagen, a Chemical Sub	een thoroughl <u>y</u> g/kg; Inhalation /l; nd reproductiv	n LCLO (rabbit e effector.	-
				RTECS Number: MW40250				
Carciı	nogenicit	<b>y</b> :	NTP? No	IARC Monographs? No	OSHA Re	egulated? No		
CAS	#	Hazardous Com	ponents (Che	mical Name)	NTP	IARC	ACGIH	OSHA
764	7-01-0	Hydrochloric acid			n.a.	3	A4	n.a.
773	2-18-5	Water			n.a.	n.a.	n.a.	n.a.
			Secti	on 12. Ecological	Informat	ion		
12.1 12.2	Toxicity Persiste	: ence and		e into the environment. fire control or dilution water lable.	may cause p	ollution.		
12.3	Degradability: 2.3 Bioaccumulative Potential:		No data avai	lable.				
12.4				lable.				
12.5	Results assessr		3 No data available.					
12.6	Other a	dverse effects:	No data avai	lable.				
			Sectio	n 13. Disposal Co	onsiderat	ions		
13.1	Waste D	)isposal Method:	Dispose in a	ccordance with local, state,	and federal r	egulations.		
			Sect	ion 14. Transport	Informat	ion		
	LAND 1	RANSPORT (US I	DOT):					
14.1								
D D	OT Hazar		: Not danı	gerous goods.				
D D U	OT Hazar N/NA Nur	d Class: nber:						
D U 14.1 A U	OT Hazar N/NA Nur LAND 1	d Class: nber: RANSPORT (Euro hipping Name: r:	opean ADR/R					
D U 14.1 A U H 14.3	OT Hazar N/NA Nur LAND T DR/RID S N Numbe azard Cla AIR TR	d Class: mber: RANSPORT (Euro hipping Name: r: ess: ANSPORT (ICAO/I	opean ADR/R Not dang IATA):	<b>ID):</b> gerous goods.				
D D U 14.1 A U H 14.3	OT Hazar N/NA Nur LAND T DR/RID S N Numbe azard Cla AIR TR	d Class: mber: RANSPORT (Euro hipping Name: r: ss: ANSPORT (ICAO/I Shipping Name:	opean ADR/R Not dang IATA): Not dang	ID):	e, and federal	l regulations.		



	uperfund Amonda	nents and Reauthorization Act	of 1986) Lists		
CAS #	-i	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7647-01-0	Hydrochloric acid		Yes 500 LB	Yes 5000 LB	Yes
7732-18-5	Water		No	No	No
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA o	r State Lists	
7647-01-0	Hydrochloric acic			CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes - Inventory, 4 Test; CA PROP.65: No	
7732-18-5	Water		CAA HAP,ODC: Inventory; CA P	No; CWA NPDES: ROP.65: No	No; TSCA: Yes -
Regulatory Inf Statement:	formation	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	:	06/07/2015			
Additional Information About		No data available.			
		currently available to us. Howe express or implied, with respec- use. Users should make their their particular purposes.	ct to such informatior	n, and we assume no	b liability resulting from it



Revision: 05/21/2015 Supersedes Revision: 04/13/2010

		acco	ording to Regulation (EC) No. 190	7/2006 as amended b	oy (EC) No. 1272/200	08
		Section 1. I	dentification of the Substar	nce/Mixture and of	the Company/U	ndertaking
.1	Product	Code:	700141			
	Product	Name:	Methyltransferase Assay	Buffer		
	Synonyn	ns:	MT Assay Buffer;			
1.2	Relevant	identified uses of	the substance or mixture a	nd uses advised a	against:	
	Releva	nt identified uses:	For research use only, no	ot for human or vete	erinary use.	
1.3	Details o	f the Supplier of t	he Safety Data Sheet:			
	Compa	ny Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	pany		
	Web si	te address:	www.caymanchem.com			
	Informa	ation:	Cayman Chemical Comp	bany	+1 (73	4)971-3335
1.4	Emergen	icy telephone num			·	
	-	ency Contact:	CHEMTREC Within USA	and Canada:	+1 (80	0)424-9300
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887
			Section 2. Haz	zards Identifi	cation	
2.1	Classific	ation of the Subst	ance or Mixture:			
2.1.1	Classific	cation according t	o Regulation (EC) No 1272/2	2008 [CLP]:		
2.2	Label Ele	ements:				
2.2.1	Labeling	g according to Reg	gulation (EC) No 1272/2008	[CLP]:		
	GHS H Based GHS P No phra GHS R No phra GHS S	recaution Phrases ases apply. esponse Phrases ases apply. torage and Dispos	sal Phrases:			cording to GHS.
2.3	Please refer to Section 7 for Storage and Section 13 for Disposal information.Adverse Human HealthMaterial 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					
		Secti	on 3. Composition	/Information	on Ingredie	nts
				Concentration	EC No./	
CAS RTE(		Hazardous Comp REACH Registrati	onents (Chemical Name)/ ion No.		EC Index No.	GHS Classification



Revision: 05/21/2015 Supersedes Revision: 04/13/2010

1       Description of First Aid       Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory         Measures:       arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious we laboured breathing; half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up Keep watching the victim: contorly object all. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.         In Case of Inhalation:       Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained person Get immediate medical attention.         In Case of Skin Contact:       Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contamir clothing. Get medical attention if symptoms occur. Wash clothing before reuse.         In Case of Eye Contact:       Hold eyelida apart and flush eyes with plenty of water for at least 15 minutes. Have eyes exami 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. Victim is fully conscious: immediately induce vomit lugestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigit.htm).         2       Important Symptoms and       Exposure may cause nausea, vomiting and diarrhea.         Effects, Both Acute and Inhalation may result in coughing and shortness of breath.       Skin contact may result in redness, itching, and pain; chronic dermatiti
Get immediate medical attention.         In Case of Skin Contact:         Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contamin 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 examinand 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. Victim is fully conscious: immediately induce vomit Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm).         2       Important Symptoms and Exposure may cause nausea, vomiting and diarrhea.         Effects, Both Acute and Delayed:       Skin contact may result in coughing and shortness of breath.         Delayed:       Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.         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:         2       Flammable Properties andNo data available.       Hazards:         No data available.       UEL: No data.       UEL: No data.         Autoignition Pt:       No data.       UEL: No data. </th
<ul> <li>clothing. Get medical attention if symptoms occur. Wash clothing before reuse.</li> <li>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.</li> <li>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. Victim is fully conscious: immediately induce vomit Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm).</li> <li>Important Symptoms and Exposure may cause nausea, vomiting and diarrhea.</li> <li>Effects, Both Acute and Inhalation may result in coughing and shortness of breath.</li> <li>Delayed: Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.</li> </ul>
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. Victim is fully conscious: immediately induce vomit Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm). 2 Important Symptoms and Exposure may cause nausea, vomiting and diarrhea. Effects, Both Acute and Inhalation may result in coughing and shortness of breath. Delayed: Skin contact may result in redness, itching, and pain; chronic dermatitis may follow. Section 5. Fire Fighting Measures 1 Suitable Extinguishing Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers. Unsuitable Extinguishing A solid water stream may be inefficient. Media: Use water stream may be inefficient. Media: No data available. Flash Pt: No data. Explosive Limits: LEL: No data. Autoignition Pt: No data.
unconscious person. Get medical attention. Victim is fully conscious: immediately induce vomit         Ingestion of large quantities: immediately to hospital. Call Poison Information Centre (www.big.be/antigif.htm).         Important Symptoms and Exposure may cause nausea, vomiting and diarrhea.         Effects, Both Acute and Delayed:       Inhalation may result in coughing and shortness of breath.         Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.         Section 5. Fire Fighting Measures         Media:       Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.         Use water spray to cool fire-exposed containers.         Unsuitable Extinguishing Media:       A solid water stream may be inefficient.         Media:       No data available.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Autoignition Pt:       No data.
Effects, Both Acute and Delayed:       Inhalation may result in coughing and shortness of breath. Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.         Suitable Extinguishing       Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers. Unsuitable Extinguishing         A solid water stream may be inefficient. Media:       Use alcohol vater stream may be inefficient. Media:         Plammable Properties andNo data available. Hazards: No data available.       No data available. Hazards: No data.         Flash Pt:       No data.         LEL: No data.       UEL: No data.         Autoignition Pt:       No data.
Delayed:       Skin contact may result in redness, itching, and pain; chronic dermatitis may follow.         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:       Vertical available.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Utel: No data.       UEL: No data.
Section 5. Fire Fighting Measures         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:       Vertical available.         Planmable Properties andNo data available.       Hazards:         No data available.       No data.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         UEL: No data.       UEL: No data.
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:       Media:         2       Flammable Properties andNo data available.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Autoignition Pt:       No data.
Media:       Use water spray to cool fire-exposed containers.         Unsuitable Extinguishing       A solid water stream may be inefficient.         Media:       Image: Containers.         Planmable Properties and No data available.       Image: Containers.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Autoignition Pt:       No data.
Unsuitable Extinguishing       A solid water stream may be inefficient.         Media:
Media:       Flammable Properties and No data available.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Autoignition Pt:       No data.
2       Flammable Properties and No data available.         Hazards:       No data available.         Flash Pt:       No data.         Explosive Limits:       LEL: No data.         Autoignition Pt:       No data.
Hazards:No data available.Flash Pt:No data.Explosive Limits:LEL: No data.UEL: No data.Autoignition Pt:No data.
No data available.Flash Pt:No data.Explosive Limits:LEL: No data.UEL: No data.Autoignition Pt:No data.
Flash Pt:No data.Explosive Limits:LEL: No data.UEL: No data.Autoignition Pt:No data.
Explosive Limits:LEL: No data.UEL: No data.Autoignition Pt:No data.
Autoignition Pt: No data.
-
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
1 Protective Precautions, Avoid breathing vapors and provide adequate ventilation.
Protective Equipment and As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respira
<b>Emergency Procedures:</b> and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
2 Environmental Take steps to avoid release into the environment, if safe to do so.
Precautions:
3 Methods and Material For Contain spill and collect, as appropriate.
Containment and CleaningTransfer to a chemical waste container for disposal in accordance with local regulations.
Up:



Revision: 05/21/2015 Supersedes Revision: 04/13/2010

					ng and Stor	<u> </u>	
.1	Precautions To Be Taken Avoid breathing dust/fume/gas/mist/vapours/spray.						
	in Hand	•	oid prolonged or		osure.		
.2		ions To Be Taken Ke		-			
	in Storir	ng: Sto	ore in accordance	e with informat	tion listed on the p	product insert.	
		Section	n 8. Expos	ure Conti	rols/Person	al Protection	
.1	Exposur	e Parameters:					
CAS	#	Partial Chemical Na	ne	Britain EH	140	France VL	Europe
	NA	Methyltransferase Ass	ay Buffer	No data.		No data.	No data.
CAS	#	Partial Chemical Na	ne	OSHA TW	/A	ACGIH TWA	Other Limits
	NA	Methyltransferase Ass	ay Buffer	No data.		No data.	No data.
.2	Exposur	e Controls:				•	ł
.2.1	Enginee	ering Controls Us	e process enclos	ures, local ext	haust ventilation,	or other engineering c	controls to control airbo
	(Ventilat	tion etc.): lev	els below recomi	mended expos	sure limits.		
.2.2	Persona	al protection equipme	nt:				
	Eye Pro	tection: Sa	fety glasses				
	Protecti	ve Gloves: Co	mpatible chemica	al-resistant glo	oves		
	Other Protective Clothing:Lab coat						
	Other P	rotective Clothing:La	o coat				
		_		espirator, as co	onditions warrant.		
		tory Equipment NI		espirator, as co	onditions warrant.		
	Respira (Specify	tory Equipment NI	DSH approved re		onditions warrant.		
	Respira (Specify	tory Equipment Nie v Type): ygienic/Maintenan Do	DSH approved re not take internal	lly.			wash facility and a safe
	Respira (Specify Work/Hy	tory Equipment Nie v Type): ygienic/Maintenan Do tices: Fa	DSH approved re not take internal cilities storing or ower.	lly. utilizing this m			wash facility and a safe
	Respira (Specify Work/Hy	tory Equipment Nic v Type): ygienic/Maintenan Do tices: Fa shi Wa	DSH approved re not take internal cilities storing or ower. ash thoroughly af	lly. utilizing this m			wash facility and a safe
	Respira (Specify Work/Hy	tory Equipment Nic v Type): ygienic/Maintenan Do tices: Fa shi Wa	DSH approved re not take internal cilities storing or ower.	lly. utilizing this m			wash facility and a safe
	Respira (Specify Work/Hy	tory Equipment Nie v Type): ygienic/Maintenan Do tices: Fa sh Wa No	DSH approved re not take internal cilities storing or ower. ush thoroughly af data available.	lly. utilizing this m ter handling.		equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract	tory Equipment Nie v Type): ygienic/Maintenan Do tices: Fa sh Wa No	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy	lly. utilizing this m ter handling. <b>rsical and</b>	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract	tory Equipment Nie v Type): ygienic/Maintenan Do tices: Fa sh Wa No Sec	DSH approved re not take internal cilities storing or ower. ish thoroughly af data available. ion 9. Phy and Chemical	lly. utilizing this m ter handling. <b>rsical and</b>	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract	tory Equipment Nic ygienic/Maintenan Do tices: Fa wa No Sec ion on Basic Physica il States: ance and Odor:	DSH approved re not take internal cilities storing or ower. Ish thoroughly af data available. ion 9. Phy and Chemical [] Gas Solution	lly. utilizing this m ter handling. <b>/SiCAL AND</b> Properties	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract	tory Equipment Nic ygienic/Maintenan Do tices: Fa sh Wa No Sec ion on Basic Physica il States: ance and Odor: Point:	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [] Gas Solution No data.	lly. utilizing this m ter handling. <b>/SiCAL AND</b> Properties	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract	tory Equipment Nic ygienic/Maintenan Do tices: Fa wa No Sec ion on Basic Physica of States: ance and Odor: Point: Point:	DSH approved re not take internal cilities storing or ower. Ish thoroughly af data available. ion 9. Phy and Chemical [] Gas Solution No data. No data.	lly. utilizing this m ter handling. <b>/SiCAL AND</b> Properties	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt	tory Equipment Nic ygienic/Maintenan Do tices: Fa shi Wa No Sec ion on Basic Physica il States: ance and Odor: Point: Point: t:	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [ ] Gas Solution No data. No data. No data.	lly. utilizing this m ter handling. <b>/SiCAL AND</b> Properties	naterial should be	equipped with an eye	wash facility and a safe
0.1	Respira (Specify Work/Hy ce Pract Pract Physica Appeara Melting Boiling Flash Pt Evapora	tory Equipment Nic ygienic/Maintenan Do tices: Fa wa No Sec ion on Basic Physica ance and Odor: Point: Point: t: ation Rate:	DSH approved re not take internal cilities storing or ower. Ish thoroughly af data available. ion 9. Phy and Chemical [] Gas Solution No data. No data. No data. No data.	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe
0.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt Evapora Flamma	tory Equipment Nite ygienic/Maintenan Do tices: Fa shu Wa No Sec ion on Basic Physica al States: ance and Odor: Point: Point: t: ation Rate: ability (solid, gas):	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [ ] Gas Solution No data. No data. No data. No data. No data. No data ava	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt Evapora Flamma Explosit	tory Equipment Nik ygienic/Maintenan Do tices: Fa shu Wa No Sec ion on Basic Physica ance and Odor: Point: Point: t: ation Rate: ability (solid, gas): ye Limits:	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [] Gas Solution No data. No data. No data. No data. No data ava LEL: No da	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract Physica Appeara Melting Boiling Flash Pt Evapora Flamma Explosit	tory Equipment Nite ygienic/Maintenan Do tices: Fa shu Wa No Sec ion on Basic Physica al States: ance and Odor: Point: Point: t: ation Rate: ability (solid, gas):	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [] Gas Solution No data. No data. No data. No data. No data ava LEL: No da	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe
0.1	Respira (Specify Work/Hy ce Pract Pract Physica Appeara Melting Boiling Flash Pt Evapora Flamma Explosiv Vapor P Hg):	tory Equipment Nik ygienic/Maintenan Do tices: Fa shu Wa No Sec ion on Basic Physica ance and Odor: Point: Point: t: ation Rate: ability (solid, gas): ye Limits:	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [] Gas Solution No data. No data. No data. No data. No data ava LEL: No da	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe
.1	Respira (Specify Work/Hy ce Pract Informat Physica Appeara Melting Boiling Flash Pt Evapora Flamma Explosiv Vapor P Hg): Vapor D	tory Equipment Nik ygienic/Maintenan Do tices: Fa shi Wa No Sec ion on Basic Physica al States: ance and Odor: Point: Point: t: ation Rate: ability (solid, gas): ye Limits: Pressure (vs. Air or magentic Pressure (vs. Air or magenti	DSH approved re not take internal cilities storing or ower. ash thoroughly af data available. ion 9. Phy and Chemical I [] Gas Solution No data. No data. No data. No data. No data ava LEL: No data. m No data.	lly. utilizing this m ter handling. <b>/SiCal and</b> <b>Properties</b> [ X ] Liquid	naterial should be	equipped with an eye	wash facility and a safe



Revision: 05/21/2015 Supersedes Revision: 04/13/2010

	Autoigni	ition Pt	No d	ata				
9.2	-	ormation						
5.2	Percent Volatile:		No d	ata				
	T crocint	Volutile.						
			Secti	on 10. Stability and	d Reactivi	ty		
10.1	Reactivi	ty:	No data avai	ilable.				
10.2	Stability	:	Unstable [	] Stable [ X ]				
10.3	Stability	Note(s):	Stable if stor	red in accordance with inform	nation listed on	the product i	insert.	
	Polymer	ization:	Will occur [	] Will not occur [ X ]				
10.4	Conditio	ons To Avoid:	heat					
			moisture					
10.5	Incompa	atibility - Materials	aluminum s					
	To Avoid	d:	brass					
			copper					
			oxidizing age					
			strong bases	5				
10.6	Hazardo	us	carbon dioxi	de				
	Decomp	osition or	carbon mono	oxide				
	Byprodu	icts:	nitrogen oxic	des				
			Sectio	n 11. Toxicologica	I Informat	ion		
11.1	Informat	ion on		gical effects of this product h			udied.	
		ogical Effects:				lereaging etc		
Carci			NTP? No	IARC Monographs? No	OSHA Reg	ulated? No		
	arcinogenicity:							
CAS	<u> </u>	Hazardaya Cam	nononto (Ch	amical Nama)				08114
CAS		Hazardous Com			NTP	IARC	ACGIH	OSHA
CAS	# NA	Hazardous Com Methyltransferase	e Assay Buffe	r	n.a.	n.a.	ACGIH n.a.	OSHA n.a.
CAS			e Assay Buffe		n.a.	n.a.		
CAS		Methyltransferase	e Assay Buffe Secti	r	n.a.	n.a.		
	NA	Methyltransferase	e Assay Buffe Secti Avoid releas	ion 12. Ecological	n.a.	n.a.		
	NA	Methyltransferase	e Assay Buffe Secti Avoid releas	ion 12. Ecological ise into the environment. fire control or dilution water r	n.a.	n.a.		
12.1	NA Toxicity:	Methyltransferase	Assay Buffe Secti Avoid releas Runoff from	ion 12. Ecological ise into the environment. fire control or dilution water r	n.a.	n.a.		
12.1	NA Toxicity: Persiste	Methyltransferase	Assay Buffe Secti Avoid releas Runoff from	ion 12. Ecological se into the environment. fire control or dilution water r ilable.	n.a.	n.a.		
12.1	NA Toxicity: Persiste Degrada	Methyltransferase	Assay Buffe Secti Avoid releas Runoff from No data ava	ion 12. Ecological se into the environment. fire control or dilution water r ilable.	n.a.	n.a.		
12.1	NA Toxicity: Persiste Degrada Bioaccu	Methyltransferase	Assay Buffe Secti Avoid releas Runoff from No data ava	ion 12. Ecological ie into the environment. fire control or dilution water r ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility	Methyltransferase	Avoid releas Runoff from No data avai No data avai	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid releas Runoff from No data avai No data avai	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid releas Runoff from No data avai No data avai	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		
12.1 12.2 12.3 12.4 12.5	NA Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	Methyltransferase nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Assay Buffe Secti Avoid releas Runoff from No data ava No data ava No data ava No data ava	ion 12. Ecological is into the environment. fire control or dilution water r ilable. ilable. ilable.	n.a.	n.a.		



Revision: 05/21/2015 Supersedes Revision: 04/13/2010

CHIMICAL				Supe	ersedes Revision: 04/13/201		
		Section 13. Dispos	sal Considera	tions			
13.1 Waste Dis	sposal Method:	Dispose in accordance with loca	al, state, and federal	regulations.			
		Section 14. Tran	sport Informa	tion			
14.1 LAND TR	ANSPORT (US I	DOT):					
DOT Proper	Shipping Name:	Not dangerous goods.					
DOT Hazard	Class:						
UN/NA Numb	per:						
	-	opean ADR/RID):					
	pping Name:	Not dangerous goods.					
UN Number: Hazard Class							
	s. NSPORT (ICAO/I	ΙΔΤΔ).					
	hipping Name:	Not dangerous goods.					
Additional Trans		Transport in accordance with lo	ocal, state, and federa	al regulations.			
Information:				-			
		Section 15. Regu	latory Informa	tion			
EPA SARA (Sup	erfund Amendm	nents and Reauthorization Act	of 1986) Lists				
CAS #	Hazardous Com	ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
NA M	Methyltransferase	e Assay Buffer	No	No	No		
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or	State Lists			
NA M	Methyltransferase	e Assay Buffer	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				
Regulatory Inform	mation	This SDS was prepared in acco	ordance with 29 CFR	1910.1200 and R	egulation (EC)		
Statement:		No.1272/2008.					
		Section 16. Oth	ner Informatio	n			
Revision Date:		05/21/2015					
Additional Inform	nation About	No data available.					
This Product:							
Company Policy	or Disclaimer:	DISCLAIMER: This 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.					



Multi-region format

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

						•
	according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 1272/2008					
		Section 1. Ide	entification of the Substan	ce/Mixture and of t	he Company/Ur	ndertaking
1.1	Product Product Synony	Name:	700142 Methyltransferase Assay MT Assay Buffer Additive			
1.2	Relevan	t identified uses of th	ne substance or mixture a	nd uses advised ag	gainst:	
	Releva	ant identified uses:	For research use only, no	ot for human or veteri	inary 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	any		
	Web s	ite address:	www.caymanchem.com			
	Inform	ation:	Cayman Chemical Comp	any	+1 (734	4)971-3335
1.4	Emerge	ncy telephone numbe	er:			
	Emerç	ency Contact:	CHEMTREC Within USA CHEMTREC Outside US			0)424-9300 3)527-3887
			Section 2. Haz	zards Identific	ation	
2.1 2.2 2.3	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposal e refer to Section 7 for e Human Health M and Symptoms: M Ti	None ently available data this subs Phrases: Storage and Section 13 for aterial may be irritating to th ay be harmful by inhalation ay cause eye, skin, or respi ne toxicological properties of	Disposal information he mucous membran , ingestion, or skin at iratory system irritatio of this product have n	n. bes and upper res bsorption. on. hot been fully eval	piratory tract. uated.
		Sectio	n 3. Composition	/Information c	on Ingredier	nts
CAS RTE	6 # / CS #	Hazardous Compon REACH Registratior	ents (Chemical Name)/ n No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA		Methyltransferase Assa	y Buffer Additive	100.0 %	NA NA	No data available.



Revision: 06/07/2015 Supersedes Revision: 04/13/2010

		Section 4	4. First Aid Measure	es	
4.1	Description of First Aid				
	Measures:				
	In Case of Inhalation:	Remove to fresh air. In Get immediate medica	f not breathing, give artificial re al attention.	spiration or give oxygen by	trained personnel.
	In Case of Skin Contact:	-	n with soap and plenty of wate attention if symptoms occur. W		move contaminated
	In Case of Eye Contact:	•	d flush eyes with plenty of wate	U U	ve eyes examined
	In Case of Ingestion:		water provided person is conso Get medical attention. Do NOT		-
		Section 5.	Fire Fighting Meas	ures	
5.1	Suitable Extinguishing	Use alcohol-resistant	foam, carbon dioxide, water, o	r dry chemical spray.	
	Media:	Use water spray to co	ool fire-exposed containers.		
	Unsuitable Extinguishing Media:	A solid water stream	may be inefficient.		
5.2	Flammable Properties ar	dNo data available.			
0	Hazards:				
		No data available.			
	Flash Pt:	No data.			
	Explosive Limits:	LEL: No data.	UEL: No data.		
	Autoignition Pt:	No data.			
5.3	-		elf-contained breathing appara	tus pressure-demand (NIOS	H approved or
5.5	The Fighting instruction.	-	rotective gear to prevent conta		
		Section 6. Ac	cidental Release Me	easures	
6.1	Protective Precautions,	•	eathing dust, and provide adeque		
	Protective Equipment an		t, wear a NIOSH approved self		
	Emergency Procedures:	and appropriate pers	onal protection (rubber boots,	safety goggles, and heavy re	ubber gloves).
6.2	Environmental	Take steps to avoid r	elease into the environment, if	safe to do so.	
	Precautions:				
6.3	Methods and Material Fo				
	Containment and Cleanii Up:	ng I ransfer to a chemic	al waste container for disposal	in accordance with local reg	julations.
		Section 7.	Handling and Stor	age	
7.1	Precautions To Be Taker	-	fume/gas/mist/vapours/spray.		
	in Handling:	Avoid prolonged or re	peated exposure.		
7.2	Precautions To Be Taker				
	in Storing:	Store in accordance v	with information listed on the pr	roduct insert.	
	Sec	tion 8. Exposu	re Controls/Persona	al Protection	
8.1	Exposure Parameters:				
CAS #	# Partial Chemica	Name	Britain EH40	France VL	Europe
	NA Methyltransferase	e Assay Buffer	No data.	No data.	No data.
					Multi-region format



# SAFETY DATA SHEET Methyltransferase Assay Buffer Additive

		Additive				
CAS	#	Partial Chemica	I Name	OSHA TWA	ACGIH TWA	Other Limits
	NA	Methyltransferas Additive	e Assay Buffer	No data.	No data.	No data.
8.2	Exposi	ure Controls:				
8.2.1	Engine	eering Controls	Use process encl	osures, local exhaust vent	ilation, or other engineering co	ontrols to control airbo
	(Ventil	ation etc.):	levels below reco	mmended exposure limits.		
8.2.2	Persor	nal protection equ	ipment:			
	Eye Pr	otection:	Safety glasses			
	Protec	tive Gloves:	Compatible chem	ical-resistant gloves		
	Other	Protective Clothin	<b>g:</b> Lab coat			
	-	atory Equipment fy Type):	NIOSH approved	respirator, as conditions w	varrant.	
			n Do not take intern	ally.		
	ce Pra			-	ould be equipped with an eyev	vash facility and a safe
			shower.			
			Wash thoroughly	after handling.		
			No data available			
		S	Section 9. Ph	ysical and Chem	ical Properties	
<b>ə</b> .1		-	sical and Chemica	-		
	-	al States:	[ ] Gas	[X]Liquid []Solid		
		rance and Odor:	Solution			
		g Point:	No data.			
	-	g Point:	No data.			
	Flash		No data.			
		ration Rate:	No data.			
		nability (solid, gas)				
		sive Limits:	LEL: No c	data.	UEL: No data.	
	Vapor Hg):	Pressure (vs. Air o	or mm No data.			
	Vapor	Density (vs. Air =	1): No data.			
	Specif	ic Gravity (Water =	<b>= 1):</b> No data.			
	Solubi	lity in Water:	No data.			
	Autoig	nition Pt:	No data.			
9.2	Other I	nformation				
	Percer	nt Volatile:	No data.			
			Section <sup>2</sup>	10. Stability and I	Reactivity	
10.1	Reacti	-	No data available			
10.2	Stabili	-		Stable [ X ]		
10.3		ty Note(s):			ion listed on the product insert	t.
	-	erization:	Will occur [ ]	Will not occur [ X ]		
10.4	Condit	tions To Avoid:	No data available			
10.5			Is No data available			
	Το Ανα	oid:				
10.6	Hazaro	dous	No data available			
						Multi vaniar fa
						Multi-region fo



Revision: 06/07/2015 Supersedes Revision: 04/13/2010

	-	osition or						
By	yprodu	cts:						
			Section 11. Toxico	ological	Inform	ation		
11.1       Information on       The toxicological effects of this product have not been thoroughly studied.         Toxicological Effects:       The toxicological effects of this product have not been thoroughly studied.						udied.		
Carcinog	jenicity	:	NTP? No IARC Monograp	ohs? No	OSHA R	egulated? No		
CAS #		Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
NA	۸	Methyltransferase	Assay Buffer Additive		n.a.	n.a.	n.a.	n.a.
			Section 12. Ecolo	ogical Ir	format	tion		
12.1 To	oxicity:		Avoid release into the environn	nent.				
			Runoff from fire control or diluti	ion water ma	ay cause p	ollution.		
		nce and	No data available.					
	egradal	-	<b>.</b>					
-	ioaccur otential	nulative	No data available.					
	obility i		No data available.					
			No data available.					
	ssessm							
12.6 Of	ther ad	verse effects:	No data available.					
			Section 13. Dispo	sal Con	siderat	ions		
13.1 W	aste Di	sposal Method:	Dispose in accordance with loc					
			Section 14. Trar	nsport Ir	format	tion		
L		RANSPORT (US I		-1 1				
		Shipping Name:						
	-	l Class:						
UN/N	IA Num	iber:						
14.1 L	AND T	RANSPORT (Euro	ppean ADR/RID):					
ADR/	/RID Sh	hipping Name:	Not dangerous goods.					
	lumber							
	rd Clas							
		NSPORT (ICAO/I	-					
		Shipping Name:	Not dangerous goods.	ocal atota	and fadara	Iroquisticas		
Addition Informat		sport	Transport in accordance with le	ocal, state, a	anu redera	regulations.		
·····			Section 15. Regu	latory b	oformo	tion		
EPA SAF	KA (Su		ents and Reauthorization Act ponents (Chemical Name)	of 1986) Li S. 302 (		S. 304 RQ	C 24	3 (TRI)
NA		•	Assay Buffer Additive	S. 302 (		5. 304 RQ	No	, ( i NI)
	-	-	-					
CAS #			ponents (Chemical Name) Assay Buffer Additive			State Lists o; CWA NPDE	S. No. TSCA	
	`	menymansieidse	Assay Duner Audilive	PROP.6			U. NU, TOUA	INU, UA
	-							
							Ν	Iulti-region form



Revision: 06/07/2015 Supersedes Revision: 04/13/2010

Cayman	Supersedes Revision: 04/13/2010
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:	06/07/2015
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.



Revision: 06/08/2015 Supersedes Revision: 04/13/2010 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:** 700143 Product Name: Methyltransferase Enzyme Mixture Synonyms: MT Enzyme Mixture; 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. May be harmful by inhalation, ingestion, or skin absorption. Effects and Symptoms: 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)/ Concentration EC No./ GHS Classification **RTECS # REACH Registration No.** EC Index No. NA Methyltransferase Enzyme Mixture 100.0 % NA No data available. NA NA

Multi-region format



Revision: 06/08/2015 Supersedes Revision: 04/13/2010

			Section 4	4. First Aid Measure	es	
4.1	Descript	ion of First Aid				
	Measure	es:				
	In Case	of Inhalation:	Remove to fresh air. If Get immediate medica	f not breathing, give artificial re al attention.	spiration or give oxygen by	rained personnel.
	In Case	of Skin Contact:	-	n with soap and plenty of wate attention if symptoms occur. W		nove contaminated
	In Case	of Eye Contact:	Hold eyelids apart and and tested by medical	flush eyes with plenty of wate personnel.	er for at least 15 minutes. Ha	ve eyes examined
	In Case	of Ingestion:		water provided person is conse Get medical attention. Do NOT		-
			Section 5.	Fire Fighting Meas	ures	
5.1	Suitable	Extinguishing	Use alcohol-resistant	foam, carbon dioxide, water, o	r dry chemical spray.	
	Media:		Use water spray to co	ol fire-exposed containers.		
	Unsuitat Media:	ole Extinguishing	A solid water stream r	may be inefficient.		
5.2	Flammal	ble Properties an	<b>d</b> No data available.			
	Hazards	:				
			No data available.			
	Flash Pt	:	No data.			
	Explosiv	e Limits:	LEL: No data.	UEL: No data.		
	Autoigni	tion Pt:	No data.			
5.3	Fire Figh	nting Instructions	:As in any fire, wear se	elf-contained breathing appara	tus pressure-demand (NIOS	H approved or
			equivalent), and full p	rotective gear to prevent conta	ct with skin and eyes.	
			Section 6. Acc	cidental Release Me	easures	
6.1	Protectiv	ve Precautions,	Avoid breathing vapo	ors and provide adequate venti	ation.	
	Protectiv	ve Equipment and		t, wear a NIOSH approved sel		
	Emerger	ncy Procedures:	and appropriate pers	onal protection (rubber boots,	safety goggles, and heavy ru	ıbber gloves).
6.2	Environ	mental	Take steps to avoid r	elease into the environment, if	safe to do so.	
	Precauti					
6.3			r Contain spill and coll			
		ment and Cleanir	ig I ransfer to a chemica	al waste container for disposal	in accordance with local reg	ulations.
	Up:					
			Section 7.	Handling and Stor	age	
7.1	Precauti	ons To Be Taken	-	fume/gas/mist/vapours/spray.		
	in Handl		Avoid prolonged or re			
7.2	Precauti	ons To Be Taken	Keep container tightly			
	in Storin	g:	Store in accordance v	vith information listed on the pr	oduct insert.	
		Sec	tion 8. Exposu	re Controls/Persona	al Protection	
8.1	Exposure	e Parameters:				
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe
	NA	Methyltransferase	e Enzyme Mixture	No data.	No data.	No data.
	••••••					

Multi-region format

CAS	¥	Partial Chemical	Name	OSHA TWA	ACGIH TWA	edes Revision: 04/13/2010 Other Limits			
543									
	NA	Methyltransferase	e Enzyme Mixture	No data.	No data.	No data.			
.2	-	re Controls:							
8.2.1	-	ering Controls		res, local exhaust ventilation, o	or other engineering co	ontrols to control airbor			
• -	-	(Ventilation etc.): levels below recommended exposure limits. Personal protection equipment:							
3.2.2			-						
	•	otection:	Safety glasses						
		ive Gloves:	Compatible chemical	-resistant gloves					
		rotective Clothing							
	-	tory Equipment	NIOSH approved res	pirator, as conditions warrant.					
		(Specify Type):							
			Do not take internally						
	ce Prac	tices:		tilizing this material should be	equipped with an eyew	vash facility and a safet			
			shower.						
			Wash thoroughly after	er nandling.					
			No data available.						
		S	ection 9. Phys	sical and Chemical I	Properties				
.1			sical and Chemical P	-					
	-	al States:		X ] Liquid [ ] Solid					
		ance and Odor:	Solution						
	Melting		No data.						
	Boiling		No data.						
	Flash P		No data.						
	-	ation Rate:	No data.						
		ability (solid, gas)							
	•	ve Limits:	LEL: No data	a. UEL:	No data.				
	-	Pressure (vs. Air o	<b>r mm</b> No data.						
	Hg):								
	-	Density (vs. Air = 1	-						
	-	c Gravity (Water =	-						
		ity in Water:	No data.						
	Autoigr	nition Pt:	No data.						
9.2	Other In	formation							
	Percent	t Volatile:	No data.						
			Section 10	. Stability and Reac	tivity				
0.1	Reactiv	ity:	No data available.						
0.2	Stability	<b>y</b> :	Unstable [ ] Sta	ble [ X ]					
0.3	Stability	y Note(s):	Stable if stored in acc	cordance with information liste	d on the product inser	t.			
	Polyme	rization:	Will occur [ ] Wi	ill not occur [ X ]					
0.4	Conditi	ons To Avoid:	No data available.						
0.5	Incomp	atibility - Material	<b>s</b> No data available.						
	To Avo	id:							
0.6	Hazardo	ous	No data available.						
	Decom	position or							
	Byprod	-							
						Multi-region for			



Multi-region format

Methyltransferase Enzyme Mixture

Toxica arcinogenia AS # NA NA .1 Toxici .2 Persis Degra .3 Bioac Poten .4 Mobili .5 Result asses .6 Other .1 Waste .1 Waste .1 Uaste .1 LAND DOT Pro DOT Haz UN/NA N 4.1 LAND DOT Haz UN/NA N 4.1 LAND ADR/RID UN Numi Hazard C 4.3 AIR T ICAO/IAT dditional Tr	Hazardous Com Methyltransferase ty: ty: stence and dability: cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	Section 12. Ecol Avoid release into the environ Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. Section 13. Dispo Dispose in accordance with loc	phs? No OSHA <u>NTP</u> n.a. Ogical Inform ment. tion water may caus osal Consider cal, state, and federa	Regulated? No         IARC         n.a.         ation         e pollution.	udied.	OSHA n.a.
AS # NA NA NA NA NA NA NA NA NA NA NA NA NA	Hazardous Com Methyltransferase ity: tty: tetence and dability: cumulative tial: ity in Soil: ts of PBT and vPvB sment: adverse effects:	ponents (Chemical Name) E Enzyme Mixture Section 12. Ecol Avoid release into the environe Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. No data available. Section 13. Dispose Dispose in accordance with low	NTP         n.a.         ogical Inform         ment.         tion water may caus         osal Consider         cal, state, and federa	IARC         n.a.         ation         e pollution.		
AS # NA NA NA NA NA NA NA NA NA NA NA NA NA	Hazardous Com Methyltransferase ty: ty: tatence and dability: cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	ponents (Chemical Name) E Enzyme Mixture Section 12. Ecol Avoid release into the environe Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. No data available. Section 13. Dispose Dispose in accordance with low	NTP         n.a.         ogical Inform         ment.         tion water may caus         osal Consider         cal, state, and federa	IARC         n.a.         ation         e pollution.		
NA 2.1 Toxici 2.2 Persis Degra 2.3 Bioac Poten 2.4 Mobili 2.5 Result asses 2.6 Other 3.1 Waste 4.1 LANE DOT Pro DOT Haz UN/NA N 4.1 LANE ADR/RID UN NumI Hazard C 4.3 AIR T ICAO/IAT Additional Tre	Methyltransferase ty: stence and dability: cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	Enzyme Mixture Section 12. Ecol Avoid release into the environ Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. Section 13. Dispo Dispose in accordance with low Section 14. Trai	n.a. ogical Inform ment. tion water may caus	ation ation a pollution. ations al regulations.		
2.1 Toxici 2.2 Persis Degra 2.3 Bioac Poten 2.4 Mobili 2.5 Result asses 2.6 Other 3.1 Waste 3.1 Waste 14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT	ty: stence and dability: cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	Section 12. Ecol Avoid release into the environ Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. Section 13. Dispo Dispose in accordance with loc	ogical Inform ment. tion water may caus osal Consider cal, state, and federa	ation e pollution. ations al regulations.		
<ul> <li>2.2 Persis Degra</li> <li>2.3 Bioac Poten</li> <li>2.4 Mobili</li> <li>2.5 Resultant</li> <li>2.5 Resultant</li> <li>2.6 Other</li> <li>3.1 Waster</li> <li>3.1 Waster</li> <li>3.1 Uaster</li> <li>3</li></ul>	etence and dability: cumulative tial: ity in Soil: its of PBT and vPvB sment: adverse effects:	Avoid release into the environmentation of the environ	ment. tion water may caus osal Consider cal, state, and federa	e pollution. Ations		
<ul> <li>2.2 Persis Degra</li> <li>2.3 Bioac Poten</li> <li>2.4 Mobili</li> <li>2.5 Resultasses</li> <li>2.6 Other</li> <li>3.1 Waster</li> <li>3.1 Waster</li> <li>3.1 Waster</li> <li>14.1 LANE DOT Pro DOT Haz UN/NA N</li> <li>14.1 LANE ADR/RID UN Numi Hazard C</li> <li>14.3 AIR T ICAO/IAT</li> <li>Additional Tr</li> </ul>	etence and dability: cumulative tial: ity in Soil: its of PBT and vPvB sment: adverse effects:	Runoff from fire control or dilut No data available. No data available. No data available. No data available. No data available. <b>Section 13. Dispo</b> Dispose in accordance with low	tion water may caus	ations al regulations.		
Degra Degra Poten 2.4 Mobili 2.5 Resultasses 2.6 Other 3.1 Waster 3.1 Waster 14.1 LANE DOT Pro DOT Haz UN/NA N 14.1 LANE ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional T	dability: cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	No data available. No data available. No data available. No data available. No data available. <b>Section 13. Dispo</b> Dispose in accordance with low	osal Consider	ations al regulations.		
12.3 Bioac Poten 12.4 Mobili 12.5 Result asses 12.6 Other 13.1 Waste 14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T	cumulative tial: ty in Soil: ts of PBT and vPvB sment: adverse effects:	No data available. No data available. No data available. Section 13. Dispo Dispose in accordance with loc Section 14. Trai	cal, state, and feder	al regulations.		
Poten 12.4 Mobili 12.5 Result asses 12.6 Other 13.1 Waster 14.1 LANE DOT Pro DOT Haz UN/NA N 14.1 LANE ADR/RID UN Numil Hazard C 14.3 AIR T ICAO/IAT Additional Transport	tial: ty in Soil: ts of PBT and vPvB sment: adverse effects: Disposal Method:	No data available. No data available. No data available. Section 13. Dispo Dispose in accordance with loc Section 14. Trai	cal, state, and feder	al regulations.		
12.4 Mobili 12.5 Result asses 12.6 Other 13.1 Waste 14.1 LANE DOT Pro DOT Haz UN/NA N 14.1 LANE ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T	ty in Soil: ts of PBT and vPvB sment: adverse effects:	No data available. No data available. Section 13. Dispo Dispose in accordance with loo Section 14. Trai	cal, state, and feder	al regulations.		
I2.5 Result asses I2.6 Other I3.1 Waste I3.1 Waste I3.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN NumI Hazard C 14.3 AIR T ICAO/IAT Additional T	ts of PBT and vPvB sment: adverse effects: Disposal Method:	No data available. No data available. Section 13. Dispo Dispose in accordance with loo Section 14. Trai	cal, state, and feder	al regulations.		
asses 12.6 Other 13.1 Waste 14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T	sment: adverse effects: Disposal Method:	No data available. Section 13. Dispo Dispose in accordance with low Section 14. Trai	cal, state, and feder	al regulations.		
12.6 Other 13.1 Waster 14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T	adverse effects: Disposal Method:	Section 13. Dispo Dispose in accordance with low Section 14. Trai	cal, state, and feder	al regulations.		
13.1 Waste 14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T	Disposal Method:	Section 13. Dispo Dispose in accordance with low Section 14. Trai	cal, state, and feder	al regulations.		
14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T		Dispose in accordance with loo Section 14. Trai	cal, state, and feder	al regulations.		
14.1 LAND DOT Pro DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional T		Section 14. Trai		-		
DOT Pro DOT Haz UN/NA N 14.1 LANE ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional T	TRANSPORT (US I		nsport Inform	ation		
DOT Pro DOT Haz UN/NA N 14.1 LANE ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional T	TRANSPORT (US I	DOT):				
DOT Haz UN/NA N 14.1 LAND ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional T						
UN/NA N 14.1 LANE ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional T	per Shipping Name:	Not dangerous goods.				
14.1 LAND ADR/RID UN Numl Hazard C 14.3 AIR T ICAO/IAT Additional Tr						
ADR/RID UN Numi Hazard C 14.3 AIR T ICAO/IAT Additional Tr	umber: ) TRANSPORT (Euro					
UN Numl Hazard C 14.3 AIR T	Shipping Name:	Not dangerous goods.				
14.3 AIR T ICAO/IAT Additional Ti		Not dangerede geede.				
ICAO/IAT Additional T	lass:					
Additional T	RANSPORT (ICAO/I	ATA):				
	A Shipping Name:	Not dangerous goods.				
Information:	ransport	Transport in accordance with	local, state, and fede	eral regulations.		
		Section 15. Regu	ulatory Inform	ation		
•		ents and Reauthorization Ac	-			
CAS #		ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ		B (TRI)
NA	Methyltransferase		No	No	No	
CAS #		ponents (Chemical Name)	Other US EPA o			
NA		e Enzyme Mixture	CAA HAP,ODC PROP.65: No	No; CWA NPDE	S: No; TSCA:	No; CA



contract	Supersedes Revision: 04/13/2010 This SDS was prepared in accordance with 29 CER 1910 1200 and Regulation (EC)				
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:	06/08/2015				
Additional Information About	No data available.				
This Product:					
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.				



### Methyltransferase Assay AdoHcy Positive Control

Revision: 06/07/2015 Supersedes Revision: 04/13/2010

		Section 1. Id	dentification of the Substar	nce/ivlixture and o	i the Company/U	ndertaking
.1	Product	Code:	700145			_
	Product	Name:	Methyltransferase Assay	AdoHcy Positive C	Control	
	Synonyr	ms:	MT Assay AdoHcy Posit	-		
.2	Relevan	t identified uses of	the substance or mixture a	and uses advised a	against:	
		ant identified uses:	For research use only, n		-	
1.3	Details o	of the Supplier of th	ne Safety Data Sheet:			
	Compa	any Name:	Cayman Chemical Com	pany		
			1180 E. Ellsworth Rd.			
	Ann Arbor, MI 4810					
	-		www.caymanchem.com		. 4 (70	4)074 0005
			Cayman Chemical Com	pany	+1 (73	4)971-3335
1.4	-	ncy telephone num				
	6,		CHEMTREC Within USA			,
			CHEMTREC Outside US			13)527-3887
			Section 2. Ha	zards Identif	ication	
2.1	Classification of the Substance or Mixture:					
2.2	Label El	lements:				
2.2		lements: Signal Word:	None			
2.2	GHS S		None			
2.2	GHS S GHS F	Signal Word: Hazard Phrases:	<b>None</b> rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS H Based	Signal Word: Hazard Phrases:	rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS H Based GHS F	<b>Signal Word:</b> Hazard Phrases: I on evaluation of cur	rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS H Based GHS P No phr	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases	rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS F Based GHS F No phr GHS F	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply.	rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS H Based GHS P No phr GHS R No phr	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases:	rently available data this sub	ostance or mixture is	s not classifiable ad	ccording to GHS.
2.2	GHS S GHS F Based GHS F No phr GHS F No phr GHS S	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos	rently available data this sub			ccording to GHS.
2.2	GHS S GHS H Based GHS P No phr GHS R No phr GHS S Please	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 fo	rently available data this sub : al Phrases:	r Disposal informati	on.	
	GHS S GHS F Based GHS F No phr GHS S Please Adverse	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health	rrently available data this sub : al Phrases: or Storage and Section 13 fo	r Disposal information	on. anes and upper res	
	GHS S GHS F Based GHS F No phr GHS S Please Adverse	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 fo e Human Health and Symptoms:	rrently available data this sub : al Phrases: or Storage and Section 13 fo Material may be irritating to t	r Disposal informati the mucous membra n, ingestion, or skin	on. anes and upper res absorption.	
	GHS S GHS F Based GHS F No phr GHS S Please Adverse	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms:	rently available data this sub <b>al Phrases:</b> or Storage and Section 13 fo Material may be irritating to t May be harmful by inhalation	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita	on. anes and upper res absorption. tion.	spiratory tract.
	GHS S GHS F Based GHS F No phr GHS S Please Adverse	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms: Section	rently available data this sub al Phrases: or Storage and Section 13 fo Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge on 3. Composition	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information	on. anes and upper res absorption. tion. properties have no on Ingredie	spiratory tract. t been thoroughly investiga
2.3	GHS S GHS F Based GHS P No phr GHS S Please Adverse Effects	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms: Section	rently available data this sub al Phrases: or Storage and Section 13 fo Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge on 3. Composition ponents (Chemical Name)/	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p	on. anes and upper res absorption. tion. properties have no	spiratory tract. t been thoroughly investiga
2.3	GHS S GHS F Based GHS F No phr GHS S Please Adverse Effects	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms: Section Hazardous Compo	rently available data this sub al Phrases: or Storage and Section 13 fo Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge On 3. Composition onents (Chemical Name)/ on No.	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information	on. anes and upper res absorption. tion. oroperties have no On Ingredie EC No./	spiratory tract. t been thoroughly investiga <b>nts</b>
2.3 CAS RTE NA NA 773	GHS S GHS F Based GHS F No phr GHS S Please Adverse Effects	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms: Section Hazardous Comport REACH Registration	rently available data this sub al Phrases: or Storage and Section 13 fo Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge On 3. Composition onents (Chemical Name)/ on No.	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration	on. anes and upper res absorption. tion. properties have no On Ingredie EC No./ EC Index No. NA	spiratory tract. t been thoroughly investiga <b>NtS</b> <b>GHS Classification</b>
2.3 CAS RTE NA NA 773	GHS S GHS F Based GHS F No phr GHS S Please Adverse Effects	Signal Word: Hazard Phrases: I on evaluation of cur Precaution Phrases rases apply. Response Phrases: rases apply. Storage and Dispos e refer to Section 7 for e Human Health and Symptoms: Section Hazardous Comport REACH Registration Adenosylhomocystein	rently available data this sub al Phrases: or Storage and Section 13 fo Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge On 3. Composition onents (Chemical Name)/ on No.	r Disposal information the mucous membra n, ingestion, or skin piratory system irrita e, the toxicological p n/Information Concentration 0.04 %	on. anes and upper res absorption. tion. oroperties have no On Ingredie EC No./ EC Index No. NA NA NA 231-791-2	spiratory tract. t been thoroughly investiga <b>NtS</b> GHS Classification No data available.

Multi-region format



# SAFETY DATA SHEET Methyltransferase Assay AdoHcy Positive Control

		Section 4	4. First Aid Measure	es	
4.1	Description of First Aid				
	Measures:				
	In Case of Inhalation:	Remove to fresh air. I Get immediate medica	f not breathing, give artificial re al attention.	espiration or give oxygen by	trained personnel.
	In Case of Skin Contact:	Immediately wash ski	n with soap and plenty of wate	r for at least 15 minutes. Rei	move contaminated
		clothing. Get medical	attention if symptoms occur. W	lash clothing before reuse.	
	In Case of Eye Contact:	Hold eyelids apart and	d flush eyes with plenty of wate	er for at least 15 minutes. Ha	ive eyes examined
		and tested by medical	-		
	In Case of Ingestion:		water provided person is cons Get medical attention. Do NOT		-
			Fire Fighting Meas	ures	
ـــــــــــــــــــــــــــــــــــــ	Suitable Extinguishing		foam, carbon dioxide, water, o		
	Media:		ool fire-exposed containers.	in ally cholmoal opray.	
	Unsuitable Extinguishin	g A solid water stream	may be inefficient.		
	Media:	-			
5.2	Flammable Properties a	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 Instruction	-	elf-contained breathing appara protective gear to prevent conta		H approved or
		Section 6. Ac	cidental Release Me	easures	
6.1	Protective Precautions,	•	ors and provide adequate venti		
			it, wear a NIOSH approved sel		
	Emergency Procedures		onal protection (rubber boots,		ubber gloves).
6.2	Environmental Precautions:	Take steps to avoid r	release into the environment, if	safe to do so.	
6.3	Methods and Material Fe	•			
	Containment and Clean Up:	i <b>ng</b> Transfer to a chemic	al waste container for disposal	in accordance with local reg	gulations.
		Section 7.	Handling and Stor	age	
7.1	Precautions To Be Take	n Avoid breathing dust/	fume/gas/mist/vapours/spray.		
	in Handling:	Avoid prolonged or re	epeated exposure.		
7.2	Precautions To Be Take	n Keep container tightly	/ closed.		
	in Storing:	Store in accordance v	with information listed on the p	roduct insert.	
	Sec	ction 8. Exposu	re Controls/Persona	al Protection	
8.1	Exposure Parameters:	· ·			
CAS	# Partial Chemica	al Name	Britain EH40	France VL	Europe
	NA Adenosylhomoc	ysteine	No data.	No data.	No data.
			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Multi-region format



# SAFETY DATA SHEET Methyltransferase Assay AdoHcy Positive Control

Page: 3 of 5

773	2-18-5	Water		No data.	No data.	No data.			
CAS #		Partial Chemical	Name	OSHA TWA	ACGIH TWA	Other Limits			
	NA	Adenosylhomocy	steine	No data.	No data.	No data.			
773	2-18-5	Water		No data. No data.		No data.			
3.2		e Controls:							
3.2.1	Enginee	ering Controls tion etc.):	-	es, local exhaust ventilation ended exposure limits.	n, or other engineering co	ontrols to control airborr			
3.2.2	Persona	al protection equi	pment:						
	Eye Pro	tection:	Safety glasses						
	Protecti	ve Gloves:	Compatible chemical-	resistant gloves					
	Other P	rotective Clothing	:Lab coat						
	Respira (Specify	tory Equipment / Type):	NIOSH approved resp	pirator, as conditions warra	nt.				
	Work/Hy	ygienic/Maintenar	Do not take internally						
	ce Pract	tices:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety						
			shower.						
			Wash thoroughly afte	r handling.					
			No data available.						
		S	ection 9. Phys	ical and Chemica	I Properties				
9.1	Informat	ion on Basic Phy	sical and Chemical Pr	operties					
	Physica	I States:	[]Gas []	X]Liquid []Solid					
		ance and Odor:	Solution						
	Melting		No data.						
	Boiling		No data.						
	Flash Pi		No data.						
		ation Rate:	No data.	b la					
		bility (solid, gas):			· No doto				
		ve Limits:	LEL: No data r mm No data.	. UEL	.: No data.				
	Vapor P Hg):	ressure (vs. Air o	rmm no data.						
		ensity (vs. Air = 1	): No data.						
	-	Gravity (Water =	,						
	•	ty in Water:	No data.						
		ition Pt:	No data.						
	-		No data.						
9.2			No doto						
	Percent	Volatile:	No data.						
10.4	Desit	14		Stability and Rea	ασιινιιγ				
10.1	Reactivi	-	No data available.						
10.2 10.3	Stability Stability	/: / Note(s):		ole [ X ] ordance with information lis	ted on the product insort				
10.3	-	rization:		I not occur [ X ]	aco on the product insen				
04	-		No data available.						
10.4		ons To Avoid:							
10.5	Incompa To Avoi	-	s No data available.						
10 6			No data available.						
10.6	Hazardo	Jus	INU UALA AVAIIADIE.						
						Multi-region for			



Methyltransferase Assay AdoHcy Positive Control

	Decomp Byprodu	osition or Icts:						
			Section 11. Toxico	logical In	formati	on		
11.1 Carci	Informat Toxicolo nogenicity	ogical Effects:	The toxicological effects of this NTP? No IARC Monograph		not been th OSHA Regu		udied.	
CAS	#	Hazardous Com	ponents (Chemical Name)	N	ITP	IARC	ACGIH	OSHA
	NA	Adenosylhomocy	steine	n	.a.	n.a.	n.a.	n.a.
773	2-18-5	Water		n	.a.	n.a.	n.a.	n.a.
		·	Section 12. Ecolo	gical Info	ormatio	n		
12.1 12.2	Toxicity Persiste	nce and	Avoid release into the environm Runoff from fire control or dilution No data available.		cause pollu	ition.		
12.3 12.4	Degradability:         Bioaccumulative       No data available.         Potential:       No data available.         Mobility in Soil:       No data available.							
12.5	-	of PBT and vPvB	No data available. No data available.					
12.6	Other ac	lverse effects:	No data available.					
			Section 13. Dispos	sal Consi	deratio	ns		
13.1	Waste D	isposal Method:	Dispose in accordance with loca	al, state, and f	ederal regu	lations.		
			Section 14. Tran	sport Info	ormatio	n		
D			-					
U	DR/RID S N Numbe azard Cla		Not dangerous goods.					
Addi	CAO/IATA tional Tran mation:	Shipping Name: nsport	Not dangerous goods. Transport in accordance with lo	ocal, state, and	d federal re	gulations.		
			Section 15. Regu	latory Info	ormatio	n		
	-	1	ents and Reauthorization Act	-				
CAS			ponents (Chemical Name)	S. 302 (EH	,	. 304 RQ	S. 313	(TRI)
770	NA	Adenosylhomocy	steine	No	N		No	
113	2-18-5	Water		No	N	0	No	
							Μ	ulti-region format



### Methyltransferase Assay AdoHcy Positive Control

CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or State Lists		
NA Adenosylhomocy		/steine	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No		
7732-18-5 Water			CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No		
Regulatory Information Statement:		This SDS was prepared in acco No.1272/2008.	rdance with 29 CFR 1910.1200 and Regulation (EC)		
		Section 16. Oth	ner Information		
Revision Date	:	06/07/2015			
	ormation About	No data available.			
This Product: 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		



Multi-region format

### Methyltransferase Assay S-Adenosylmethionine

		Section 1.	Identification of the Substar	nce/Mixture and o	f the Company/U	ndertaking	
.1	Product Co	de:	700146				
	Product Na	me:	Methyltransferase Assay	S-Adenosylmethio	onine		
	Synonyms:		MT Assay SAM;	-			
1.2	Relevant ide	entified uses o	of the substance or mixture a	and uses advised a	against:		
	Relevant i	dentified uses	: For research use only, no	ot for human or vet	erinary use.		
1.3	Details of th	e Supplier of	the Safety Data Sheet:				
	Company	Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	bany			
	Web site a	ddress:	www.caymanchem.com				
	Informatio	on:	Cayman Chemical Comp	bany	+1 (73	4)971-3335	
1.4	Emergency	telephone nu	nber:				
	• •	y Contact:	CHEMTREC Within USA	and Canada:	+1 (80	0)424-9300	
			CHEMTREC Outside US	A and Canada:	+1 (70	3)527-3887	
			Section 2. Haz	zards Identif	ication		
2.1	Classifiesti	an of the Sube			loadon		
2.1.1	Classification of the Substance or Mixture:						
2.2							
2.2.1	Label Elements:						
L. <u>L</u> . I							
	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.						
	•						
	•	s apply. <b>Donse Phrases</b>	3:				
	•	oonse Phrases	:				
	GHS Resp No phrase	oonse Phrases					
	GHS Resp No phrase GHS Stor	oonse Phrases s apply. age and Dispo		Disposal information	on.		
2.3	GHS Resp No phrase GHS Stor Please ref	oonse Phrases s apply. age and Dispo	sal Phrases:	-		spiratory tract.	
2.3	GHS Resp No phrase GHS Stora Please ref Adverse Hu	oonse Phrases s apply. age and Dispo er to Section 7	sal Phrases: for Storage and Section 13 for	he mucous membra	anes and upper res	spiratory tract.	
2.3	GHS Resp No phrase GHS Stora Please ref Adverse Hu	oonse Phrases s apply. age and Dispo er to Section 7 uman Health	<b>isal Phrases:</b> for Storage and Section 13 for Material may be irritating to t	he mucous membra n, ingestion, or skin	anes and upper res absorption.	spiratory tract.	
2.3	GHS Resp No phrase GHS Stora Please ref Adverse Hu	oonse Phrases s apply. age and Dispo er to Section 7 uman Health	<b>isal Phrases:</b> for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation	he mucous membra , ingestion, or skin iratory system irrita	anes and upper res absorption. ation.		
2.3	GHS Resp No phrase GHS Stora Please ref Adverse Hu	oonse Phrases s apply. age and Dispo er to Section 7 uman Health I Symptoms:	sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp	he mucous membra , ingestion, or skin iratory system irrita of this product have	anes and upper res absorption. ation. e not been fully eva	luated.	
2.3 CAS : RTEC	GHS Resp No phrase GHS Stor Please ref Adverse Hu Effects and	s apply. age and Dispo er to Section 7 uman Health Symptoms:	for Storage and Section 13 for Material may be irritating to t May be harmful by inhalation May cause eye, skin, or resp The toxicological properties of tion 3. Composition	he mucous membra , ingestion, or skin iratory system irrita of this product have	anes and upper res absorption. ation. e not been fully eva	luated.	



# SAFETY DATA SHEET Methyltransferase Assay S-Adenosylmethionine

			Section 4	4. First Aid M	easures	
4.1	Descrip	tion of First Aid				
	Measur	es:				
	In Case	of Inhalation:	Remove to fresh air. If Get immediate medicate	0.0	artificial respiration or give oxyge	n by trained personnel.
	In Case	of Skin Contact:	-		y of water for at least 15 minutes s occur. Wash clothing before reu	
	In Case	of Eye Contact:	Hold eyelids apart and and tested by medical		ty of water for at least 15 minute	s. Have eyes examined
	In Case	of Ingestion:			n is conscious. Never give anyth . Do NOT induce vomiting unless	
			Section 5.	Fire Fighting	Measures	
5.1	Suitable	e Extinguishing	Use alcohol-resistant	foam, carbon dioxide	e, water, or dry chemical spray.	
	Media:		Use water spray to co	ool fire-exposed conta	ainers.	
	Unsuita Media:	ble Extinguishing	A solid water stream	may be inefficient.		
5.2		ble Properties an	<b>d</b> No data available.			
	Hazards	-				
	Flash P	t:	No data.			
	Explosi	ve Limits:	LEL: No data.	UEL:	No data.	
		ition Pt:	No data.			
5.3	-			elf-contained breathir	ng apparatus pressure-demand (I	NIOSH approved or
5.5	Therig		-		vent contact with skin and eyes.	
			Section 6. Ac	cidental Relea	ase Measures	
6.1	Protecti	ive Precautions,	Avoid breathing vapo	ors and provide adeq	uate ventilation.	
					roved self-contained breathing a	
	Emerge	ncy Procedures:	and appropriate pers	onal protection (rubb	er boots, safety goggles, and hea	avy rubber gloves).
6.2	Environ	mental	Take steps to avoid r	elease into the enviro	onment, if safe to do so.	
	Precaut	ions:				
6.3	Method	s and Material Fo	r Contain spill and coll	ect, as appropriate.		
	Contain	ment and Cleanin	gTransfer to a chemic	al waste container for	r disposal in accordance with loca	al regulations.
	Up:					
			Section 7.	Handling an	d Storage	
7.1	Precaut	ions To Be Taken	Avoid breathing dust/	fume/gas/mist/vapou	rs/spray.	
	in Hand	lling:	Avoid prolonged or re	epeated exposure.		
7.2	Precaut	ions To Be Taken	Keep container tightly	v closed.		
	in Stori	ng:	Store in accordance v	with information listed	on the product insert.	
		Sec	tion 8. Exposu	re Controls/P	ersonal Protection	
8.1	Exposur	e Parameters:				
CAS	4	Partial Chemical	Name	Britain EH40	France VL	Europe
2434	l6-00-7	(3S)-5'-[(3-Amino- ylsulphonio]-5'-de chloride	3-carboxypropyl)meth oxyadenosine	No data.	No data.	No data.
		•				Multi-region format



#### SAFETY DATA SHEET Methyltransferase Assay S-Adenosylmethionine

3.2.1 Engir (Vent	(3S)-5'-[(3-Amino-3-car ylsulphonio]-5'-deoxyad	boxypropyl)meth	No data.	No data.	No data.			
3.2.1 Engir (Vent	Chionae	lenosine			no data.			
(Vent	sure Controls:		ł	<b> </b>	ŀ			
•	neering Controls Use	process enclosu	res, local exhaust ventil	ation, or other engineering co	ontrols to control airborr			
	ilation etc.): leve	Is below recomm	ended exposure limits.					
3.2.2 Perso	onal protection equipmer	it:						
Eye F	Protection: Safe	ety glasses						
Prote	ctive Gloves: Con	npatible chemical-	-resistant gloves					
Other	r Protective Clothing:Lab	coat						
Resp	iratory Equipment NIO	SH approved res	pirator, as conditions wa	arrant.				
(Spec	cify Type):							
Work	/Hygienic/Maintenan Do	not take internally	'.					
ce Pr	actices: Fac	lities storing or ut	tilizing this material sho	uld be equipped with an eyev	vash facility and a safety			
	sho							
		sh thoroughly afte	er handling.					
	No data available.							
	Section 9. Physical and Chemical Properties							
.1 Inform	nation on Basic Physical	and Chemical Pr	roperties					
Physi	ical States:	[]Gas [	] Liquid [X] Solid					
Арре	arance and Odor:	A lyophilized p	powder					
Meltin	ng Point:	No data.						
Boilir	ng Point:	No data.						
Flash	Pt:	No data.						
Evap	oration Rate:	No data.						
	mability (solid, gas):	No data availa						
-	osive Limits:	LEL: No data	l.	UEL: No data.				
Vapo Hg):	r Pressure (vs. Air or mm	No data.						
Vapo	r Density (vs. Air = 1):	No data.						
Spec	ific Gravity (Water = 1):	No data.						
Solut	oility in Water:	No data.						
Autoi	gnition Pt:	No data.						
9.2 Other	Information							
Perce	ent Volatile:	No data.						
		Section 10	. Stability and F	Reactivity				
0.1 React	tivity: No	data available.	-					
0.2 Stabi	lity: Uns	table [ ] Stal	ble [ X ]					
0.3 Stabi	lity Note(s): Stal	ble if stored in acc	cordance with information	on listed on the product insert	t.			
Polyr	nerization: Will	occur [ ] Wi	II not occur [ X ]					
0.4 Cond	litions To Avoid: No	data available.						
10.5 Incon To Av	npatibility - Materials stro	ng oxidizing agen	its					
10 A (		on dioxide						
		ion aloxide ion monoxide						
Deco					Multi-region forr			



#### SAFETY DATA SHEET

Methyltransferase Assay S-Adenosylmethionine

	Byproducts:		nitrogen oxides					
			sulfur oxides					
			Section 11. Toxicol	ogical	Informa	tion		
11.1	Informat	ion on	The toxicological effects of this p	roduct hav	e not been	thoroughly stu	idied.	
	Toxicolo	gical Effects:						
Carcir	nogenicity	<b>'</b> :	NTP? No IARC Monographs	s? No	OSHA Re	OSHA Regulated? No		
CAS	#	Hazardous Com	ponents (Chemical Name)		NTP	IARC	ACGIH	OSHA
2434	16-00-7	(3S)-5'-[(3-Amino yadenosine chlori	-3-carboxypropyl)methylsulphonio ide	]-5'-deox	n.a.	n.a.	n.a.	n.a.
			Section 12. Ecolog	gical In	formati	on	ł	-
12.1	Toxicity:		Avoid release into the environme	nt.				
			Runoff from fire control or dilution	n water ma	ay cause po	llution.		
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. Dispos	al Con	siderati	ons		
13.1	Waste D	isposal Method:	Dispose in accordance with local	, state, an	d federal re	gulations.		
			Section 14. Trans	port In	formati	on		
14.1	LAND T	RANSPORT (US I	DOT):					
D	OT Prope	r Shipping Name:	Not dangerous goods.					
D	OT Hazaro	d Class:						
U	N/NA Nun	nber:						
14.1	LAND T	RANSPORT (Euro	opean ADR/RID):					
Α	DR/RID SI	nipping Name:	Not dangerous goods.					
U	N Number	:						
н	azard Cla							
14.3		NSPORT (ICAO/I						
		Shipping Name:	Not dangerous goods.					
	ional Trar nation:	isport	Transport in accordance with loc	al, state, a	and federal	regulations.		
			Castion 45 Danul		f			
			Section 15. Regula	•		ION		
			ents and Reauthorization Act o	-			1.	
CAS			ponents (Chemical Name)	S. 302 (I	EHS)	S. 304 RQ		3 (TRI)
2434	16-00-7	(3S)-5'-[(3-Amino o]-5'-deoxyadeno	-3-carboxypropyl)methylsulphoni sine chloride	No		No	No	
		•					•	
							Ν	Iulti-region format



Page: 5 of 5

### Methyltransferase Assay S-Adenosylmethionine

CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists			Other US EPA or State Lists
24346-00-7	(3S)-5'-[(3-Amino o]-5'-deoxyadeno	o-3-carboxypropyl)methylsulphoni osine chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No
Regulatory Information Statement:		This SDS was prepared in accor No.1272/2008.	dance with 29 CFR 1910.1200 and Regulation (EC)
		Section 16. Oth	er Information
Revision Date:		05/21/2015	
Additional Information About This Product:		No data available.	
Company Polic	cy or Disclaimer:	currently available to us. Howeve express or implied, with respect	s 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



Revision: 06/08/2015

Supersedes Revision: 05/17/2010

	act	cording to Regulation (EC) No. 1907/2006 as amended by (	EC) NO. 1272/2008
	Section 1.	Identification of the Substance/Mixture and of th	e Company/Undertaking
.1	Product Code:	700271	
	Product Name:	MT Assay SET7/9 (human recombinant)	
.2	Relevant identified uses of	of the substance or mixture and uses advised aga	ainst:
.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 nu	mber:	
	Emergency Contact:	CHEMTREC Within USA and Canada:	+1 (800)424-9300
		CHEMTREC Outside USA and Canada:	+1 (703)527-3887
		Section 2. Hazards Identification	ation
2.1	Classification of the Subs	stance or Mixture:	
	Skin Corrosion/Irritation	n, Category 3	
	Serious Eye Damage/Ey	ye Irritation, Category 2B	
2.2	Label Elements:		
	GHS Signal Word:	Warning	
	GHS Hazard Phrases:	Ū.	
	H316: Causes mild skin i	rritation.	
	H320: Causes eye irritati	on.	
	GHS Precaution Phrase	95:	
	P264: Wash {hands} thor	oughly after handling.	
	GHS Response Phrases	5:	
	P305+351+338: IF IN EY	ES: Rinse cautiously with water for several minutes.	Remove contact lenses, if present and easy
	to do. Continue rinsing.		
		n occurs, get medical advice/attention.	
	-	n persists, get medical advice/attention.	
	GHS Storage and Dispo		
		for Storage and Section 13 for Disposal information.	
2.3	Adverse Human Health	Causes eye irritation.	
	Effects and Symptoms:	Causes mild skin irritation.	
		Material may be irritating to the mucous membrane May be harmful by inhalation, ingestion, or skin abs	
		May cause respiratory system irritation.	
		To the best of our knowledge, the toxicological pro	perties have not been thoroughly investigated



Multi-region format

CAS # / RTECS #	Hazardous Com REACH Registra	oonents (Chemical Name)/ tion No.	Concentration	EC No./ EC Index No.	GHS Classification
NA NA	SET7/9 MT		0.0 -1.0 %	NA NA	No data available.
56-81-5 MA8050000	Glycerol		15.0 -35.0 %	200-289-5 NA	Skin Corr. 3: H316 Eye Damage 2B: H320
7647-14-5 VZ4725000	Sodium chloride		0.0 -1.0 %	231-598-3 NA	Eye Damage 2A: H319 STOT (SE) 3: H335 H336
7758-79-4 NA	Sodium phosphate		0.0 -1.0 %	231-839-2 NA	No data available.
7732-18-5 ZC0110000	Water		75.0 -100.0 %	231-791-2 NA	No data available.
		Section 4. Fi	irst Aid Meas	ures	
.1 Descr Measu	iption of First Aid				
	se of Inhalation:	Remove to fresh air. If not br Get immediate medical atten		al respiration or gi	ve oxygen by trained personnel
In Cas	se of Skin Contact:	Immediately wash skin with s clothing. Get medical attention			5 minutes. Remove contaminat before reuse.
In Cas	se of Eye Contact:	Hold eyelids apart and flush and tested by medical perso		water for at least 1	5 minutes. Have eyes examine
In Cas	se of Ingestion:	Wash out mouth with water p unconscious person. Get me medical personnel.	-	-	ive anything by mouth to an ng unless directed to do so by
.2 Impor	tant Symptoms and	Prolonged exposure may car	use nausea, headac	che, and vomiting.	
Effect Delay	s, Both Acute and ed:				
		Section 5. Fire	Fighting Me	asures	
.1 Suital Media	ole Extinguishing	Use alcohol-resistant foam, Use water spray to cool fire-			l spray.
	table Extinguishing	A solid water stream may be			
	nable Properties ar	dNo data available.			
		No data available.			
Flash	Pt:	No data.			
Explo	sive Limits:	LEL: No data.	UEL: No c	lata.	
Autoi	gnition Pt:	No data.			
.3 Fire F	ighting Instruction	<b>s:</b> As in any fire, wear self-cont equivalent), and full protectiv		-	



		Sec	ction 6. Acc	cidental Release N	Measures				
6.1	Protect	ive Precautions, Avo	id breathing vapo	ors and provide adequate ve	ntilation.				
	<b>Protective Equipment and</b> As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, <b>Emergency Procedures:</b> and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).								
	Emergency Procedures:and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).EnvironmentalTake steps to avoid release into the environment, if safe to do so.								
6.2	<b>Environmental</b> Take steps to avoid release into the environment, if safe to do so. <b>Precautions:</b>								
6.3									
	<b>Containment and Cleaning</b> Transfer to a chemical waste container for disposal in accordance with local regulations.								
	Up:								
			Section 7.	Handling and Sto	orage				
7.1									
	in Hand	0		peated exposure.					
7.2		ions To Be Taken Kee							
	in Stori	ng: Stor	e in accordance v	vith information listed on the	e product insert.				
		Section	8. Exposu	re Controls/Perso	nal Protection				
8.1	Exposu	e Parameters:							
CAS	#	Partial Chemical Name	e	Britain EH40	France VL	Europe			
	NA	SET7/9 MT		No data.	No data.	No data.			
56	-81-5	Glycerol		TWA: 10 mg/m3 () STEL: ()	TWA: 10 mg/m3	No data.			
764	7-14-5	Sodium chloride		No data.	No data.	No data.			
775	8-79-4	Sodium phosphate		No data.	No data.	No data.			
773	2-18-5	Water		No data.	No data.	No data.			
CAS	#	Partial Chemical Name	e	OSHA TWA	ACGIH TWA	Other Limits			
	NA	SET7/9 MT		No data.	No data.	No data.			
56	-81-5	Glycerol		PEL: 15 (dust); 5 (resp.) mg/m3	TLV: 10 mg/m3	No data.			
764	7-14-5	Sodium chloride		No data.	No data.	No data.			
775	8-79-4	Sodium phosphate		No data.	No data.	No data.			
773	2-18-5	Water		No data.	No data.	No data.			
8.2	Exposu	re Controls:							
8.2.1	-	-	-		n, or other engineering controls	to control airborne			
	-	,		ended exposure limits.					
8.2.2		al protection equipmen							
	•		ety glasses						
			patible chemical-	resistant gloves					
		rotective Clothing:Lab		pirator, as conditions warran	*				
	-	itory Equipment NIOS / Type):	approved resp	pirator, as conditions warrar	II.				
		y gienic/Maintenan Do r	not take internally						
	ce Prac		-		e equipped with an eyewash f	acility and a safety			
		show	-	0	, , , , , , , , , , , , , , , , , , ,	,			
		Was	h thoroughly afte	r handling.					
		No c	lata available.						
						Multi-region format			



	nfe			9. Physical			5011103		
		-		Chemical Properti					
	-	al States: ance and Odor:	-	] Gas [X] Liques [X] Liques ]	uid []Solid				
	••	ance and Odor:		510tion 7.2					
	pH: Molting	Point:		o data.					
	Melting			o data. o data.					
	Boiling Flash P			o data. o data.					
		ation Rate:		o data.					
	-	ation Rate. ability (solid, gas)		o data available.					
		ve Limits:		EL: No data.		JEL: No da	ta		
	-	Ve Linns. Pressure (vs. Air (		o data.	L. L				
	Hg):	1000010 (VO. All )		- uuu.					
		)ensity (vs. Air =	1): No	o data.					
	-	c Gravity (Water =	-	o data.					
	-	ty in Water:	-	o data.					
		-		o data.					
	-	nition Pt:	INC	u uala.					
-		formation							
	Percent	Volatile:	No	o data.					
			Sec	ction 10. Sta	bility and R	eactivit	у		
10.1	Reactiv	ity:	No data a	available.					
0.2	Stability	/:	Unstable [ ] Stable [ X ]						
10.3	Stability	/ Note(s):	Stable if s	stored in accordance	ce with informatior	n listed on t	he product	insert.	
	Polyme	rization:	Will occur	r[] Will not o	ccur [ X ]				
10.4	Conditi	ons To Avoid:	No data a	vailable.					
10.5	Incomp	atibility - Materia	Is strong bas	ses					
	To Avoi	d:	strong oxi	idizing agents					
10.6	Hazardo	ous	carbon dioxide						
	Decom	position or	carbon me	arbon monoxide					
	Byprod	ucts:							
			Sect	ion 11. Toxi	cological In	formatio	on		
11.1	Informa	tion on	The toxico	ological effects of t	his product have r	not been the	oroughly st	udied.	
	Toxicol	ogical Effects:	Glycerol -	Irritation Data: Ey	es (rabbit): 500 m	g (24h) mild	d; Skin (rab	bit): 500 mg (2	24h) mild;
	Chronic	: Toxicological	Glycerol -	Investigated as a	mutagen, reprodu	ctive effect	or, and tun	norigen.	
	Effects:	1	Only sele	ct Registry of Toxi	c Effects of Chemi	ical Substa	nces (RTE	CS) data is pre	sented here
			See actua	See actual entry in RTECS for complete information.					
			Glycerol F	RTECS Number: M	1A8050000				
Carcine	ogenicit	y:	NTP? No	IARC Monog	raphs? No O	SHA Regu	ated? No		
CAS #		Hazardous Cor	nponents (0	Chemical Name)	N	TP	IARC	ACGIH	OSHA
1	NA	SET7/9 MT			n	.a.	n.a.	n.a.	n.a.
56-8	81-5	Glycerol			n	.a.	n.a.	n.a.	n.a.
7647	-14-5	Sodium chloride	)		n.	.a.	n.a.	n.a.	n.a.
7758	-79-4	Sodium phospha	ate		n.	.a.	n.a.	n.a.	n.a.
7700	-18-5 Water				n	.a.	n.a.	n.a.	n.a.



#### SAFETY DATA SHEET MT Assay SET7/9 (human recombinant)

12.1 Toxicit				Sup	
2.1 Toxicit		Section 12. Eco	ogical Informa	ation	
	y:	Avoid release into the environ	ment.		
		Runoff from fire control or dilu	tion water may cause	pollution.	
2.2 Persist	tence and	No data available.			
-	dability:				
	umulative	No data available.			
Potent					
	y in Soil:	No data available.			
	s of PBT and vPvB	No data available.			
assess	adverse effects:	No data available.			
	averse effects.				
2.4 Wasta	Dianagal Mathadi	Section 13. Dispo			
3.1 Waste	Disposal Method:	Dispose in accordance with lo		-	
		Section 14. Tra	nsport Informa	ation	
	TRANSPORT (US I	-			
-	per Shipping Name:	Not dangerous goods.			
DOT Haza					
UN/NA Ni					
	TRANSPORT (Euro				
	Shipping Name:	Not dangerous goods.			
UN Numb Hazard Cl					
	RANSPORT (ICAO/I	ATA).			
	A Shipping Name:	Not dangerous goods.			
Additional Tra					
		Transport in accordance with	local, state, and fede	ral regulations.	
information:		Transport in accordance with	local, state, and fede	ral regulations.	
Information:				-	
		Section 15. Reg	ulatory Inform	-	
EPA SARA (S	Superfund Amendm	Section 15. Reg	ulatory Inform t of 1986) Lists	ation	S 313 (TRI)
EPA SARA (S CAS #	Superfund Amendm	Section 15. Reg	ulatory Inform	-	<b>S. 313 (TRI)</b>
EPA SARA (S	Superfund Amendm Hazardous Com SET7/9 MT	Section 15. Reg	ulatory Inform t of 1986) Lists S. 302 (EHS)	ation S. 304 RQ	
EPA SARA (S CAS # NA	Superfund Amendm Hazardous Com	Section 15. Reg	ulatory Inform t of 1986) Lists S. 302 (EHS) No	ation <b>S. 304 RQ</b> No	No
CAS # NA 56-81-5	Superfund Amendm Hazardous Com SET7/9 MT Glycerol	Section 15. Regreents and Reauthorization Action Doments (Chemical Name)	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No	ation           S. 304 RQ           No           No	No No
EPA SARA (S CAS # NA 56-81-5 7647-14-5	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride	Section 15. Regreents and Reauthorization Action Doments (Chemical Name)	ulatory Inform t of 1986) Lists S. 302 (EHS) No No No	ation           S. 304 RQ           No           No           No	No No No
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4 7732-18-5	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water	Section 15. Reg ents and Reauthorization Ac ponents (Chemical Name) e	ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No	ation         S. 304 RQ         No         No	No       No       No       No       No       No
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water	Section 15. Regreents and Reauthorization Action Doments (Chemical Name)	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA o	Ation S. 304 RQ No No No No r State Lists	No       No       No       No       No       No
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4 7732-18-5 CAS #	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water Hazardous Com	Section 15. Reg ents and Reauthorization Ac ponents (Chemical Name) e	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA o	Ation S. 304 RQ No No No No r State Lists	No       No       No       No       No       No       No
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4 7732-18-5 CAS #	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water Hazardous Com	Section 15. Reg ents and Reauthorization Ac ponents (Chemical Name) e	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA o CAA HAP,ODC: PROP.65: No	Ation S. 304 RQ No No No No State Lists No; CWA NPDES No; CWA NPDES	No       No       No       No       No       No       No
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4 7732-18-5 CAS # NA	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water Hazardous Com SET7/9 MT	Section 15. Reg ents and Reauthorization Ac ponents (Chemical Name) e	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA o CAA HAP,ODC: PROP.65: No CAA HAP,ODC: Inventory; CA P	Ation S. 304 RQ No No No No State Lists No; CWA NPDES ROP.65: No No; CWA NPDES	No No No No No : No; TSCA: No; CA
EPA SARA (S CAS # NA 56-81-5 7647-14-5 7758-79-4 7732-18-5 CAS # NA 56-81-5	Superfund Amendm Hazardous Com SET7/9 MT Glycerol Sodium chloride Sodium phosphat Water Hazardous Com SET7/9 MT Glycerol	Section 15. Reg ents and Reauthorization Ac ponents (Chemical Name) e ponents (Chemical Name)	Ulatory Inform t of 1986) Lists S. 302 (EHS) No No No No No Other US EPA o CAA HAP,ODC: PROP.65: No CAA HAP,ODC: Inventory; CA P CAA HAP,ODC: Inventory; CA P	Ation S. 304 RQ No No No No No State Lists No; CWA NPDES ROP.65: No ROP.65: No	No           State           No; TSCA: No; CA



Page: 6 of 6

Revision: 06/08/2015

Supersedes Revision: 05/17/2010 7732-18-5 Water CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes -Inventory; CA PROP.65: No This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) **Regulatory Information** No.1272/2008. Statement: Section 16. Other Information Revision Date: 06/08/2015 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.



aymar	2		say Acceptor	•	Revision: 06/07/201 Supersedes Revision: 05/17/201			
	accor	ding to Regulation (EC) No. 190	7/2006 as amended b	oy (EC) No. 1272/200	08			
	Section 1. Id	entification of the Substar	nce/Mixture and of	f the Company/U	ndertaking			
	ct Code: ct Name:	700272 SET7/9 Assay Acceptor	Peptide					
.2 Releva	Int identified uses of	the substance or mixture a	and uses advised a	against:				
Relev	vant identified uses:	For research use only, no	ot for human or vete	erinary use.				
1.3 Details	s of the Supplier of th	e Safety Data Sheet:						
Com	pany Name:	Cayman Chemical Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	pany					
Web	site address:	www.caymanchem.com						
Infor	mation:	Cayman Chemical Comp	pany	+1 (73	4)971-3335			
.4 Emerg	ency telephone num	per:						
Emei	rgency Contact:	CHEMTREC Within USA CHEMTREC Outside US			0)424-9300 3)527-3887			
		Section 2. Ha	zards Identifi	ication				
2.1 Classi	fication of the Substa	nce or Mixture:						
Skin	Corrosion/Irritation,	Category 3						
2.2 Label I	Label Elements:							
	Signal Word: Hazard Phrases:	Warning						
	6: Causes mild skin irrit	ation						
	Precaution Phrases:							
	hrases apply.							
-	Response Phrases:							
P332	2+313: If skin irritation of	occurs, get medical advice/a	ttention.					
GHS	Storage and Disposa	al Phrases:						
Plea	se refer to Section 7 fo	r Storage and Section 13 for	Disposal information	on.				
2.3 Adver	se Human Health	Causes mild skin irritation.						
Effect		Material may be irritating to t			spiratory tract.			
		May be harmful by inhalation		absorption.				
		May cause eye or respiratory	-	properties have not	t been thoroughly investigate			
		on 3. Composition		-				
CAS#/	Hazardous Compo	nents (Chemical Name)/	Concentration	EC No./ EC Index No.	GHS Classification			
	REACH Registratio	on No.						
NA NA	TAF10		0.06 %	NA NA	No data available.			
77-86-1 TY2900000	Trizma base		1.2 %	201-064-4 NA	Skin Corr. 2: H315 Eye Damage 2: H319 STOT (SE) 3: H335			
7732-18-5 ZC0110000	Water		98.7 %	231-791-2 NA	No data available.			
	•		•	•	1			



Revision: 06/07/2015 Supersedes Revision: 05/17/2010

			Section 4	4. First Aid Measure	es		
4.1	Descrip	tion of First Aid					
	Measur	es:					
	In Case	of Inhalation:	Remove to fresh air. In Get immediate medica	f not breathing, give artificial re al attention.	spiration or give oxygen by	trained personnel.	
	In Case	of Skin Contact:	-	n with soap and plenty of wate attention if symptoms occur. W		move contaminated	
	In Case of Eye Contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes e and tested by medical personnel.						
	In Case	of Ingestion:		water provided person is conso Get medical attention. Do NOT		-	
			Section 5.	Fire Fighting Meas	ures		
5.1	Suitable	e Extinguishing	Use alcohol-resistant	foam, carbon dioxide, water, o	r dry chemical spray.		
	Media:		Use water spray to co	ool fire-exposed containers.			
	Unsuita Media:	ble Extinguishing	A solid water stream	may be inefficient.			
5.2	Flamma	able Properties an	dNo data available.				
	Hazards	5:					
			No data available.				
	Flash P	t:	No data.				
	Explosi	ve Limits:	LEL: No data.	UEL: No data.			
	Autoign	ition Pt:	No data.				
5.3	Fire Fig	hting Instructions	s:As in any fire, wear se	elf-contained breathing appara	tus pressure-demand (NIOS	H approved or	
			equivalent), and full p	rotective gear to prevent conta	ct with skin and eyes.		
			Section 6. Acc	cidental Release Me	easures		
6.1		ive Precautions,	• •	ors and provide adequate venti			
	Protecti	ive Equipment an		t, wear a NIOSH approved sel			
	Emerge	ncy Procedures:	and appropriate pers	onal protection (rubber boots,	safety goggles, and heavy r	ubber gloves).	
6.2	Environ		Take steps to avoid r	elease into the environment, if	safe to do so.		
	Precaut						
6.3			r Contain spill and coll				
		ment and Cleanir	ng I ransfer to a chemica	al waste container for disposal	in accordance with local reg	julations.	
	Up:						
			Section 7.	Handling and Stor	age		
7.1	Precaut	ions To Be Taken	Avoid breathing dust/	fume/gas/mist/vapours/spray.			
	in Hand	lling:	Avoid prolonged or re	peated exposure.			
7.2	Precaut	ions To Be Taken	Keep container tightly				
	in Stori	ng:	Store in accordance v	with information listed on the pr	oduct insert.		
		Sec	tion 8. Exposu	re Controls/Persona	al Protection		
8.1	Exposur	e Parameters:					
CAS	#	Partial Chemical	Name	Britain EH40	France VL	Europe	
	NA	TAF10		No data.	No data.	No data.	

Multi-region format



				No data.	No data.		No data.			
	77-86-1         Trizma base           7732-18-5         Water									
7732	2-18-5	Water		No data.	No data.		No data.			
CAS #	¥	Partial Chemical	Name	OSHA TWA	ACGIH T	<b>WA</b>	Other Limits			
	NA	TAF10		No data.	No data.		No data.			
77-	-86-1	Trizma base		No data. No data.			No data. No data.			
7732	2-18-5	Water		No data. No data. No						
8.2	Exposure Controls:			•	ł		·			
8.2.1	.1 Engineering Controls		Use process enclos	ures, local exhaust v	entilation, or other en	gineering contr	ols to control airbo			
	(Ventilation etc.):		levels below recomr	mended exposure lin	iits.					
8.2.2	Persona	I protection equip	oment:							
	Eye Prot	tection:	Safety glasses							
	Protectiv	ve Gloves:	Compatible chemica	al-resistant gloves						
	Other Pr	otective Clothing	Lab coat							
	Respirat	ory Equipment	NIOSH approved re	spirator, as conditior	s warrant.					
	(Specify	Туре):								
	Work/Hy	gienic/Maintenan	Do not take internal	ly.						
			Facilities storing or utilizing this material should be equipped with an eyewash facility and a s							
	ce Pract	ICes:	Facilities storing or u							
	ce Pract	ICES:	shower.	-	should be equipped v	vith an eyewasi	n facility and a saf			
	ce Pract	ices:	shower. Wash thoroughly aft	-	should be equipped v	with an eyewasi	n facility and a saf			
	ce Pract	ices:	shower.	-	should be equipped v	with an eyewasi	n facility and a saf			
	ce Pract		shower. Wash thoroughly aft No data available.	ter handling.	should be equipped v		n facility and a saf			
9.1		Se	shower. Wash thoroughly aft No data available. Ection 9. Phy	ter handling.			n facility and a saf			
9.1	Informati	Second on Basic Phys	shower. Wash thoroughly aft No data available. Action 9. Phy ical and Chemical I	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical	Se ion on Basic Phys I States:	shower. Wash thoroughly aft No data available. Action 9. Phy ical and Chemical I	ter handling.	emical Propert		n facility and a saf			
9.1	Informati Physical	Second on Basic Phys	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara	Secon on Basic Phys States: I States and Odor:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH:	Secon on Basic Phys I States: Ince and Odor: Point:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH: Melting	Se fon on Basic Phys I States: Ince and Odor: Point: Point:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data.	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH: Melting I Boiling F Flash Pt	Se fon on Basic Phys I States: Ince and Odor: Point: Point:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data. No data.	ter handling. sical and Che Properties	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH: Melting I Boiling I Flash Pt Evapora	Se ion on Basic Phys I States: Ince and Odor: Point: Point:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data. No data. No data.	ter handling. Sical and Che Properties [X]Liquid []S	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH: Melting I Boiling F Flash Pt Evapora Flammal	Se ion on Basic Phys I States: Ince and Odor: Point: Point: i tion Rate:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [ ] Gas Solution 8.0 No data. No data. No data. No data. No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		h facility and a saf			
<del>)</del> .1	Informati Physical Appeara pH: Melting I Boiling I Flash Pt Evapora Flammal Explosiv	Se fon on Basic Phys I States: Ince and Odor: Point: Point: : tion Rate: bility (solid, gas):	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [ ] Gas Solution 8.0 No data. No data. No data. No data. No data. No data. No data. No data. No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		n facility and a saf			
9.1	Informati Physical Appeara pH: Melting I Boiling I Flash Pt Evapora Flammal Explosiv	Se ion on Basic Phys I States: Ince and Odor: Point: Point: : tion Rate: bility (solid, gas): re Limits:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [ ] Gas Solution 8.0 No data. No data. No data. No data. No data. No data. No data. No data. No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		h facility and a saf			
Э.1	Informati Physical Appeara pH: Melting I Boiling I Flash Pt Evapora Flammal Explosiv Vapor Pi Hg):	Se ion on Basic Phys I States: Ince and Odor: Point: Point: : tion Rate: bility (solid, gas): re Limits:	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data. No data. No data. No data. No data. No data avai LEL: No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		n facility and a saf			
<del>)</del> .1	Informati Physical Appeara pH: Melting I Boiling F Flash Pt Evapora Flammal Explosiv Vapor Pt Hg): Vapor D	Se ion on Basic Phys I States: Ince and Odor: Point: Point: tion Rate: bility (solid, gas): re Limits: ressure (vs. Air or	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data. No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		h facility and a saf			
Э.1	Informati Physical Appeara pH: Melting I Boiling I Flash Pt Evapora Flammal Explosiv Vapor Pt Hg): Vapor Do Specific	Se fon on Basic Phys I States: Ince and Odor: Point: Point: : tion Rate: bility (solid, gas): ressure (vs. Air or ensity (vs. Air = 1)	shower. Wash thoroughly aft No data available. Ection 9. Phy ical and Chemical I [] Gas Solution 8.0 No data. No data.	ter handling.          sical and Che         Properties         [X] Liquid       []S	emical Propert		h facility and a saf			



9.2	Other Info	ormation								
	Percent		No c	lata.						
			Secti	on 10. Stability and	Reactiv	vity				
10.1	Reactivit	v:	No data ava	-		<u> </u>				
10.2	Stability	-	Unstable [	Stable [ X ]						
10.3	Stability		Stable if stored in accordance with information listed on the product insert.							
	Polymeri		Will occur []     Will not occur [X]							
10.4	-	ns To Avoid:	No data available.							
10.5										
10.5	To Avoid	-	s No data available.							
10.6	Hazardo		No data ava	ilable						
10.0		osition or								
	Byprodu									
	Dyprodu		Soctio	n 11. Toxicological	Informa	otion				
		•		<u> </u>						
11.1	Informat		I he toxicolo	gical effects of this product ha	ave not beer	n thoroughly st	udied.			
Carair		gical Effects:	NTP? No	IADC Managrapha? No		aulated? No				
	nogenicity	i		IARC Monographs? No	1	egulated? No				
CAS		Hazardous Com	ponents (Ch	emical Name)	NTP	IARC	ACGIH	OSHA		
	NA	TAF10			n.a.	n.a.	n.a.	n.a.		
77	-86-1	Trizma base			n.a.	n.a.	n.a.	n.a.		
773	2-18-5	Water			n.a.	n.a.	n.a.	n.a.		
			Sect	ion 12. Ecological I	nformat	ion				
12.1	Toxicity:		Avoid releas	se into the environment.						
			Runoff from	fire control or dilution water m	nay cause p	ollution.				
12.2	Persister	nce and	No data ava	ilable.						
	Degrada	bility:								
12.3	Bioaccu	mulative	No data ava	ilable.						
	Potentia	l:								
12.4	Mobility	in Soil:	No data ava	ilable.						
12.5	Results	of PBT and vPvB	No data ava	ilable.						
	assessm	ent:								
12.6	Other ad	verse effects:	No data available.							
			Sectio	on 13. Disposal Cor	nsiderati	ions				
13.1	Waste Di	isposal Method:	Dispose in a	accordance with local, state, a	nd federal re	egulations.				



Revision: 06/07/2015 Supersedes Revision: 05/17/2010

#### Section 14. Transport Information LAND TRANSPORT (US DOT): 14.1 DOT Proper Shipping Name: Not dangerous goods. DOT Hazard Class: UN/NA Number: LAND TRANSPORT (European ADR/RID): 14.1 ADR/RID Shipping Name: Not dangerous goods. **UN Number:** Hazard Class: 14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: Not dangerous goods. Additional Transport Transport in accordance with local, state, and federal regulations. Information: Section 15. Regulatory Information EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists CAS # Hazardous Components (Chemical Name) S. 302 (EHS) S. 304 RQ S. 313 (TRI) NA **TAF10** No No No 77-86-1 Yes-Cat. N106 Trizma base No No 7732-18-5 Water No No No CAS # Hazardous Components (Chemical Name) Other US EPA or State Lists CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA NA TAF10 PROP.65: No 77-86-1 CAA HAP,ODC: HAP; CWA NPDES: No; TSCA: Yes -Trizma base Inventory; CA PROP.65: No Water 7732-18-5 CAA HAP, ODC: No; CWA NPDES: No; TSCA: Yes -Inventory; CA PROP.65: No This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) **Regulatory Information** No.1272/2008. Statement: Section 16. Other Information **Revision Date:** 06/07/2015 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.

Multi-region format