

Revision: 03/23/2019

	d	according to Regulation (EC) No. 1907/2006 as a		330 and US USHA HCS	2015		
	Section	n 1. Identification of the Substar	nce/Mixture and of t	the Company/Ur	ndertaking		
.1	Product Code: Product Name: Synonyms:	26967 1,3-Distearoyl-2-Linoleoy 9Z,12Z-octadecadienoic ester; 1,3-Stearin-2-Lino	acid, 2-[(1-oxooctade		ooctadecyl)oxy]methyl]ethyl 0-TG;		
.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 Comp 1180 E. Ellsworth Rd. Ann Arbor, MI 48108					
	Web site address:	www.caymanchem.com					
	Information:	Cayman Chemical Comp	bany	+1 (734	4)971-3335		
1.4	Emergency telephone	e number:					
	Emergency Contact	t: CHEMTREC Within USA CHEMTREC Outside US			0)424-9300 3)527-3887		
		Section 2. Ha	zards Identific	cation			
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:						
	GHS Precaution Ph No phrases apply. GHS Response Phr No phrases apply.	rases:	stance or mixture is r	not classifiable ac	cording to GHS.		
	GHS Precaution Ph No phrases apply. GHS Response Phr No phrases apply. GHS Storage and D Please refer to Secti	rases: ases: Disposal Phrases: on 7 for Storage and Section 13 for	Disposal informatior	٦.	-		
2.3	GHS Precaution Ph No phrases apply. GHS Response Phr No phrases apply. GHS Storage and D Please refer to Secti Adverse Human Hea Effects and Symptor	arases: Disposal Phrases: on 7 for Storage and Section 13 for Ith Material may be irritating to t ns: May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge	Disposal informatior he mucous membrar , ingestion, or skin al iratory system irritatio , the toxicological pro	n. hes and upper res bsorption. on. operties have not	piratory tract. been thoroughly investigated		
2.3	GHS Precaution Ph No phrases apply. GHS Response Phr No phrases apply. GHS Storage and D Please refer to Secti Adverse Human Hea Effects and Symptor	rases: Disposal Phrases: on 7 for Storage and Section 13 for Ith Material may be irritating to t ns: May be harmful by inhalation May cause eye, skin, or resp	Disposal informatior he mucous membrar , ingestion, or skin al iratory system irritatio , the toxicological pro	n. hes and upper res bsorption. on. operties have not	piratory tract. been thoroughly investigated		
CAS	GHS Precaution Ph No phrases apply. GHS Response Phr No phrases apply. GHS Storage and D Please refer to Secti Adverse Human Hea Effects and Symptor	arases: bisposal Phrases: on 7 for Storage and Section 13 for Ith Material may be irritating to t ns: May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge Section 3. Composition Components (Chemical Name)/	Disposal informatior he mucous membrar , ingestion, or skin al iratory system irritatio , the toxicological pro	n. hes and upper res bsorption. on. operties have not	piratory tract. been thoroughly investigated		

Multi-region format



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		Section 4. First Aid Measures
4.1	Description of First Aid	
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
	In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
		Section 5. Fire Fighting Measures
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
	Media:	Use water spray to cool fire-exposed containers.
	Unsuitable Extinguishing Media:	g A solid water stream may be inefficient.
5.2	Flammable Properties an Hazards:	IdNo data available.
		No data available.
	Flash Pt:	No data.
	Explosive Limits:	LEL: No data. UEL: No data.
	Autoignition Pt:	No data.
5.3	Fire Fighting Instructions	<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		r Contain spill and collect, as appropriate.
	Containment and Cleanir	ngTransfer to a chemical waste container for disposal in accordance with local regulations.
	Up:	
		Section 7. Handling and Storage
7.1	Precautions To Be Taker	Avoid breathing dust/fume/gas/mist/vapours/spray.
	in Handling:	Avoid prolonged or repeated exposure.
7.2	Precautions To Be Taker	NKeep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	

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	HEMICAL				
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					
	Eye Protection:	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	Do not take internally.			
	ce Practices:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.			
	l l	Nash thoroughly after handling.			
	1	No data available.			
	Se	ction 9. Physical and Chemical Properties			
9.1	Information on Basic Physic	cal and Chemical Properties			
	Physical States:	[]Gas []Liquid [X]Solid			
	Appearance and Odor:	A solid			
	pH:	No data.			
	Melting Point:	No data.			
	Boiling Point:	No data.			
	Flash Pt:	No data.			
	Evaporation Rate:	No data.			
	Flammability (solid, gas):	No data available.			
	Explosive Limits:	LEL: No data. UEL: No data.			
	Vapor Pressure (vs. Air or	mm No data.			
	Hg):	No data			
	Vapor Density (vs. Air = 1):				
	Specific Gravity (Water = 1)				
	Solubility in Water:	No data.			
	Solubility Notes: Octanol/Water Partition	~10 mg/ml in DMF; No data.			
	Coefficient:	NU Uala.			
	Autoignition Pt:	No data.			
	Decomposition Temperatu				
	Viscosity:	No data.			
9.2	Other Information				
	Percent Volatile:	No data.			
	Molecular Formula & Weigl	ht: C57H106O6 887.5			



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0.2 0.3 0.4 0.5	Reactivit Stability:			and Reacti	••••				
0.3 0.4 0.5	Stability:	y:	No data available.						
0.4 0.5	Stability: Unstable [] Stable [X]								
0.4 0.5	Stability	Note(s):	Stable if stored in accordance with information listed on the product insert.						
0.5	Polymeri	zation:	Will occur [ ] Will not occur [ X ]	Will occur [ ] Will not occur [ X ]					
	10.4 Conditions To Avoid:		No data available.						
		tibility - Materials	oxidizing agents						
To Avoid:									
	Hazardo		carbon dioxide						
	Decomposition or Byproducts:		carbon monoxide						
			Section 11. Toxicologi	cal Informa	ation				
	Informati Toxicolo	on on gical Effects:	The toxicological effects of this produ	ict have not beer	n thoroughly st	udied.			
CAS #	E	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
2190	)-13-8	1,3-Bis(stearoylo: (9Z,12Z)-octadec		n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecologic	al Informat	ion	·	·		
2.1	Toxicity:		Avoid release into the environment.						
	-		Runoff from fire control or dilution wa	ter may cause p	ollution.				
2.2	Persister	nce and	No data available.						
	Degrada	oility:							
2.3	Bioaccur	nulative	No data available.						
	Potential	:							
2.4	Mobility	n Soil:	No data available.						
	Results (	of PBT and vPvB	No data available.						
2.5	Results								
2.5	assessm	ent:							
2.5 2.6	assessm	ent: verse effects:	No data available.						
	assessm		No data available.	Considerat	ions				
2.6	assessm Other ad		Section 13. Disposal (						
2.6	assessm Other ad	verse effects:	Section 13. Disposal (	te, and federal re	egulations.				
2.6	assessm Other ad Waste Di	verse effects:	Section 13. Disposal ( Dispose in accordance with local, state Section 14. Transport	te, and federal re	egulations.				
2.6 3.1 14.1	assessm Other ad Waste Di	verse effects: sposal Method:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	te, and federal re	egulations.				
2.6 3.1 14.1 DC	assessm Other ad Waste Di	verse effects: sposal Method: RANSPORT (US I Shipping Name:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	te, and federal re	egulations.				
2.6 3.1 14.1 DC	assessm Other ad Waste Di LAND TI	verse effects: sposal Method: RANSPORT (US I Shipping Name: I Class:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	te, and federal re	egulations.				
2.6 3.1 14.1 DC	assessm Other ad Waste Di LAND TH DT Proper DT Hazarc	verse effects: sposal Method: RANSPORT (US I Shipping Name: I Class: ber:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo	te, and federal re	egulations.				
2.6 3.1 14.1 DC UN 14.1	Assessm Other ad Waste Di LAND TH DT Proper DT Hazarc V/NA Num LAND TH	verse effects: sposal Method: RANSPORT (US I Shipping Name: I Class: ber:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo DOT): Not dangerous goods.	te, and federal re	egulations.				
2.6 3.1 14.1 DC UN 14.1 AD	Assessm Other ad Waste Di LAND TH DT Proper DT Hazarc V/NA Num LAND TH	verse effects: sposal Method: RANSPORT (US I Shipping Name: I Class: ber: RANSPORT (Euro ipping Name:	Section 13. Disposal ( Dispose in accordance with local, sta Section 14. Transpo DOT): Not dangerous goods.	te, and federal re	egulations.				



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14.3	AIR TRANSPORT (ICAO/IATA):
14.3	AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name:

Not dangerous goods.

Additional Transport Information:

# Section 15. Regulatory Information

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

CAS # Hazardous Com		ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
2190-13-8	2190-13-8 1,3-Bis(stearoyloxy)propan-2-yl (9Z,12Z)-octadeca-9,12-dienoate		No	No	No	
CAS # Hazardous Com		ponents (Chemical Name) Other US EPA or State Lists				
2190-13-8 1,3-Bis(stearoyloxy)propan-2-yl (9Z,12Z)-octadeca-9,12-dienoate			CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory In Statement:	formation	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. O	ther Information	on		
Revision Date:		03/23/2019				
Additional Info	ormation About	No data available.				
Company Policy or Disclaimer:		DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other 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.				