

Revision: 02/26/2019

				mended by (E(.) No 2015/8	330 and US USHA HUS	/015	
			to Regulation (EC) No. 1907/2006 as a	-			
		Section 1. Id	entification of the Substar	ice/Mixture and of	the Company/Ui	ndertaking	
1.1	Product		27159				
	Product		1-Oleoyl-2-Palmitoyl-3-Li				
	Synony	ms:				co-9Z-octadecen-1-yl]oxy]pro	
			ester; 1-Olein-2-Palmitin-				
1.2		Relevant identified uses of the substance or mixture and uses advised against:					
	<b>Relevant identified uses:</b> For research use only, not for human or veterinary use.						
1.3	Details of the Supplier of the Safety Data Sheet:						
	Company Name:		Cayman Chemical Comp	any			
			1180 E. Ellsworth Rd.				
	Waha	ite address:	Ann Arbor, MI 48108				
	Inform		Cayman Chemical Comp	nan Chemical Company +1 (734)971-3335			
				any	+1 (73-	+)97 1-0000	
1.4	-	ncy telephone numb	CHEMTREC Within USA	and Canada:	1 (90	0)424 0200	
	Emerg	Jency Contact:	CHEMTREC Outside US		-	0)424-9300 3)527-3887	
						5)527-5007	
			Section 2. Haz	zards Identific	cation		
2.1	Classifi	cation of the Substa	nce or Mixture:				
		cation of the Substa lements:	nce or Mixture:				
	Label E	lements:					
	Label E GHS S	lements: Signal Word:	nce or Mixture: None				
	Label E GHS S GHS H	lements: Signal Word: Hazard Phrases:	None	stance or mixture is	not classifiable ac	cording to GHS	
	Label El GHS S GHS H Based	lements: Signal Word: Hazard Phrases: I on evaluation of curr	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	Label E GHS S GHS H Based GHS H	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases:	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	Label E GHS S GHS H Based GHS H No ph	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply.	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	Label E GHS S GHS H Based GHS H No ph GHS H	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases:	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	Label E GHS S GHS H Based GHS H No ph GHS H	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply.	None ently available data this sub	stance or mixture is	not classifiable ac	cording to GHS.	
	Label E GHS S GHS H Based GHS F No ph GHS S	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa	None ently available data this sub I Phrases:			cording to GHS.	
2.2	Label E GHS S GHS H Based GHS F No ph GHS S Please	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for	None ently available data this sub I Phrases: r Storage and Section 13 for	Disposal information	n.	-	
2.2	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to t	Disposal information	n. nes and upper res	-	
2.2	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health and Symptoms:	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to the May be harmful by inhalation	Disposal information he mucous membrar , ingestion, or skin a	n. nes and upper res bsorption.	-	
2.2	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health and Symptoms:	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp	Disposal information he mucous membrar , ingestion, or skin a iratory system irritati	n. nes and upper res bsorption. on.	spiratory tract.	
2.2	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health and Symptoms:	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp To the best of our knowledge	Disposal information he mucous membrar , ingestion, or skin a iratory system irritati e, the toxicological pr	n. nes and upper res bsorption. on. roperties have not	piratory tract.	
2.1 2.2 2.3	Label E GHS S GHS H Based GHS F No ph GHS S Please Advers	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health and Symptoms:	None ently available data this sub- al Phrases: r Storage and Section 13 for Material may be irritating to the May be harmful by inhalation May cause eye, skin, or resp	Disposal information he mucous membrar , ingestion, or skin a iratory system irritati e, the toxicological pr	n. nes and upper res bsorption. on. roperties have not	piratory tract.	
2.2 2.3	Label El GHS S GHS H Based GHS F No ph GHS S Please Advers Effects	lements: Signal Word: Hazard Phrases: I on evaluation of curr Precaution Phrases: rases apply. Response Phrases: rases apply. Storage and Disposa e refer to Section 7 for e Human Health and Symptoms: Section Section	None ently available data this sub- al Phrases: r Storage and Section 13 for 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	Disposal information he mucous membrar , ingestion, or skin a iratory system irritati e, the toxicological pr	n. nes and upper res bsorption. on. roperties have not	piratory tract.	

Multi-region format



Revision: 02/26/2019

		Section 4. First Aid Measures
4.1	Description of First Aid	
	Measures:	
	In Case of Inhalation:	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
	In Case of Skin Contact:	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
	In Case of Eye Contact:	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
	In Case of Ingestion:	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
		Section 5. Fire Fighting Measures
5.1	Suitable Extinguishing	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
	Media:	Use water spray to cool fire-exposed containers.
	Unsuitable Extinguishing Media:	g A solid water stream may be inefficient.
5.2	Flammable Properties ar 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	s: As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.
		Section 6. Accidental Release Measures
6.1	Protective Precautions,	Avoid raising and breathing dust, and provide adequate ventilation.
	Protective Equipment an	d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator,
	Emergency Procedures:	and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).
6.2	Environmental Precautions:	Take steps to avoid release into the environment, if safe to do so.
6.3	Methods and Material Fo	r Contain spill and collect, as appropriate.
	Containment and Cleanin	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	n Keep container tightly closed.
	in Storing:	Store in accordance with information listed on the product insert.
	Sec	tion 8. Exposure Controls/Personal Protection
8.1	Exposure Parameters:	

Multi-region format



8.2	Exposure Controls:							
8.2.1	Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne						
	evels below recommended exposure limits.							
8.2.2	Personal protection equipment:							
	Eye Protection:	/ glasses						
	Protective Gloves:	Compatible chemical-resistant gloves						
	Other Protective Clothing:Lab coat							
	Respiratory Equipment	H approved respirator, as conditions warrant.						
	(Specify Type):							
	Work/Hygienic/Maintenan Do not take internally.							
		Facilities storing or utilizing this material should be equipped with an eyewash and a safety shower.						
	1	Wash thoroughly after handling.						
	I	ata available.						
	<u> </u>	ation 0 Develoal and Chamical Proparties						
		ction 9. Physical and Chemical Properties						
9.1		cal and Chemical Properties						
	Physical States:	[]Gas [X]Liquid []Solid						
	Appearance and Odor:	A liquid						
	pH:	No data.						
	Melting Point:	No data. No data. No data. No data. No data available.						
	Boiling Point:							
	Flash Pt:							
	Evaporation Rate:							
	Flammability (solid, gas):							
	Explosive Limits:	LEL: No data. UEL: No data.						
	Vapor Pressure (vs. Air or	No data. No data.						
	Hg):							
	Vapor Density (vs. Air = 1):							
	Specific Gravity (Water = 1	No data.						
	Solubility in Water:	No data.						
	Solubility Notes:	~0.5 mg/ml in a 1:1 solution of EtOH:PBS (pH 7.2); ~10 mg/ml in EtOH & DMF;						
	Octanol/Water Partition	No data.						
	Coefficient:							
	Autoignition Pt:	No data.						
	Decomposition Temperatu	re: No data.						
	Viscosity:	No data.						
9.2	Other Information							
	Percent Volatile:	No data.						
	Molecular Formula & Weig	ht: C55H100O6 857.4						

Multi-region format



Revision: 02/26/2019

			Section 10. Stability a	nd Reactiv	vity				
10.1	.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.						
	Polymer	Polymerization: Will occur [ ] Will not occur [ X ]							
10.4	0.4 Conditions To Avoid: No data available.								
10.5	5 Incompatibility - Materials No data available.								
	To Avoic	l:							
10.6	Hazardo	us	No data available.						
	Decomposition or								
	Byprodu	cts:							
			Section 11. Toxicologic	al Informa	ation				
11.1	Informat	ion on	The toxicological effects of this produc	have not beer	n thoroughly st	udied.			
	Toxicolo	gical Effects:							
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA		
253	4-97-6	1-Oleoyl-2-Palmit	oyl-3-Linoleoyl-rac-glycerol	n.a.	n.a.	n.a.	n.a.		
			Section 12. Ecologica	l Informat	ion				
12.1	Toxicity:		Avoid release into the environment.						
			Runoff from fire control or dilution water may cause pollution.						
12.2	Persiste	nce and	No data available.						
	Degrada	bility:							
12.3	Bioaccu	nulative	No data available.						
	Potentia	:							
12.4	Mobility	in Soil:	No data available.						
12.5	Results	of PBT and vPvB	No data available.						
	assessm	ent:							
12.6									
	Section 13. Disposal Considerations								
13.1	Waste Di	sposal Method:	Dispose in accordance with local, state	, and federal re	egulations.				
			Section 14. Transpor	t Informat	ion				
14.1	LAND T	RANSPORT (US I	DOT):						
D	OT Prope	· Shipping Name:	Not dangerous goods.						
D	OT Hazaro	l Class:							
U U	N/NA Num	ber:							
14.1	LAND T	RANSPORT (Euro	opean ADR/RID):						
A	DR/RID Sł	nipping Name:	Not dangerous goods.						
U U	N Number	:							
н	azard Clas	SS:							



14.3	AIR TRANSPORT (I	CAO/IATA):

ICAO/IATA Shipping Name:

Not dangerous goods. Transport in accordance with local, state, and federal regulations.

Additional Transport Information:

## Section 15. Regulatory Information

CAS # Hazardous Comp		ponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)		
2534-97-6	1-Oleoyl-2-Palmitoyl-3-Linoleoyl-rac-glycerol		No	No	No		
CAS #	AS # Hazardous Components (Chemical Name)		Other US EPA or	Other US EPA or State Lists			
2534-97-6	1-Oleoyl-2-Palmitoyl-3-Linoleoyl-rac-glycerol		CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No				
Regulatory Information Statement:		This SDS was prepared in acc No.1272/2008.	ordance with 29 CFF	1910.1200 and R	egulation (EC)		
		Section 16. Ot	her Informatio	on			
Revision Date:		02/26/2019					
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.					