

			Identification of the Substar					
.1	Product	Codo:	26886			J		
••	Product			alvcerol				
	Synony			1-Myristoyl-3-Oleoyl-rac-glycerol 9Z-octadecenoic acid, 2-hydroxy-3-[(1-oxotetradecyl)oxy]propyl ester; DG(14:0/0:0/18:1); 1-Myristin-3-Olein;				
	<i>cjj</i>							
.2	Relevant identified uses of the substance or mixture and uses advised against:							
	Releva	ant identified uses	For research use only, n	For research use only, not for human or veterinary use.				
.3			he Safety Data Sheet:					
	Company Name:		Cayman Chemical Comp	bany				
			1180 E. Ellsworth Rd.					
	Wab a	ite address:	Ann Arbor, MI 48108					
			www.caymanchem.com		. 4 . (70	1)074 0005		
	Inform		Cayman Chemical Comp	bany	+1 (73	4)971-3335		
.4	-	ncy telephone nur ency Contact:	DEP: CHEMTREC Within USA	SA and Canada: +1 (800)424-9300				
			CHEMTREC Outside US			3)527-3887		
			Section 2 Ha	zards Identif	ication			
			SECTOR Z. DA					
· 1	Classifi	cation of the Subs						
		cation of the Subs ements:						
	Label E	ements:	tance or Mixture:					
	Label E GHS S	ements: ignal Word:						
	Label El GHS S GHS H	ements: ignal Word: lazard Phrases:	tance or Mixture: None		s not classifiable ar	cording to GHS		
	Label E GHS S GHS H Based	ements: Signal Word: Hazard Phrases: on evaluation of cu	tance or Mixture: None rrently available data this sub		s not classifiable ac	ccording to GHS.		
	Label El GHS S GHS H Based GHS F	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase	tance or Mixture: None rrently available data this sub		s not classifiable ad	ccording to GHS.		
	Label El GHS S GHS H Based GHS H No ph	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply.	tance or Mixture: None rrently available data this sub s:		s not classifiable ad	ccording to GHS.		
	Label E GHS S GHS H Based GHS F No ph GHS F	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases	tance or Mixture: None rrently available data this sub s:		s not classifiable ad	ccording to GHS.		
	Label E GHS S GHS H Based GHS F No ph GHS F	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply.	tance or Mixture: None rrently available data this sub s:		s not classifiable ad	ccording to GHS.		
2.1	Label E GHS S GHS H Based GHS F No ph GHS S	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo	tance or Mixture: None mrently available data this sub s: : sal Phrases:	stance or mixture is		ccording to GHS.		
	Label E GHS S GHS H Based GHS F No ph GHS S	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo	tance or Mixture: None Irrently available data this sub s:	stance or mixture is		ccording to GHS.		
2.2	Label El GHS S GHS H Based GHS F No ph GHS S Please	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo	tance or Mixture: None mrently available data this sub s: : sal Phrases:	stance or mixture is	on.	-		
2.2	Label El GHS S GHS H Based GHS H No ph GHS S Please Advers	ements: Signal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo	tance or Mixture: None Irrently available data this sub s: : sal Phrases: for Storage and Section 13 for	stance or mixture is r Disposal informati he mucous membr	ion. anes and upper res	-		
2.2	Label El GHS S GHS H Based GHS H No ph GHS S Please Advers	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo e refer to Section 7 e Human Health	tance or Mixture: None Irrently available data this sub s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalatior May cause eye, skin, or resp	stance or mixture is r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita	ion. anes and upper res absorption. ation.	spiratory tract.		
2	Label El GHS S GHS H Based GHS H No ph GHS S Please Advers	ements: Signal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo e refer to Section 7 e Human Health and Symptoms:	tance or Mixture: None Irrently available data this sub s: 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 To the best of our knowledge	r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological	ion. anes and upper res absorption. ation. properties have no	spiratory tract. t been thoroughly investigate		
2.2	Label El GHS S GHS H Based GHS H No ph GHS S Please Advers	ements: Signal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo e refer to Section 7 e Human Health and Symptoms:	tance or Mixture: None Irrently available data this sub s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalatior May cause eye, skin, or resp	r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological	ion. anes and upper res absorption. ation. properties have no	spiratory tract. t been thoroughly investigate		
2.2 2.3	Label El GHS S GHS H Based GHS H No ph GHS S Please Advers Effects	ements: Signal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo e refer to Section 7 e Human Health and Symptoms: Sect	tance or Mixture: None Irrently available data this sub s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalatior May cause eye, skin, or resp To the best of our knowledge ion 3. Composition onents (Chemical Name)/	r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological	ion. anes and upper res absorption. ation. properties have no	spiratory tract. t been thoroughly investigate		
2.2 2.3 CAS	Label El GHS S GHS H Based GHS F No ph GHS S Please Advers Effects	ements: Fignal Word: Hazard Phrases: on evaluation of cu Precaution Phrase rases apply. Response Phrases rases apply. Storage and Dispo e refer to Section 7 e Human Health and Symptoms: Sect Hazardous Comp	tance or Mixture: None Irrently available data this sub s: sal Phrases: for Storage and Section 13 for Material may be irritating to t May be harmful by inhalatior May cause eye, skin, or resp To the best of our knowledge ion 3. Composition onents (Chemical Name)/ ion No.	stance or mixture is r Disposal informati he mucous membr n, ingestion, or skin piratory system irrita e, the toxicological	ion. anes and upper res absorption. ation. properties have no ON INGREDIE EC No./	spiratory tract. t been thoroughly investigate nts		

Multi-region format



Revision: 08/09/2019

		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:	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	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 6.2	Protective Precautions, Protective Equipment an Emergency Procedures: Environmental	 Avoid raising and breathing dust, and provide adequate ventilation. d As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves). Take steps to avoid release into the environment, if safe to do so.
0.2	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	Neep 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



	HTMICAL						
8.2	Exposure Controls:						
8.2.1	Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to a						
	(Ventilation etc.):	levels below recommended exposure limits.					
8.2.2	Personal protection equip	ment:					
	Eye Protection:	Safety glasses					
	Protective Gloves:	Compatible chemical-resistant gloves					
	Other Protective Clothing:Lab coat						
	•	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					
		Wash thoroughly after handling.					
		No data available.					
							
	Se	ection 9. Physical and Chemical Properties					
9.1	Information on Basic Physi	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):						
	Vapor Density (vs. Air = 1):	No data.					
	Specific Gravity (Water = 1): No data.					
	Solubility in Water:	No data.					
	Solubility Notes:	~0.25 mg/ml in PBS (pH 7.2); ~30 mg/ml in EtOH; ~7 mg/ml in DMSO; ~20 mg/ml in 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						

Multi-region format



Multi-region format

Revision: 08/09/2019

			Section 10. Stability	and Reactiv	vity			
10.1	-							
10.2								
10.3	Stability	Note(s):	Stable if stored in accordance with information listed on the product insert.					
	Polymer	ization:	Will occur [] Will not occur [X]				
 10.4 Conditions To Avoid: No data available. 10.5 Incompatibility - Materials oxidizing agents To Avoid: 								
10.6	Hazardous Decomposition or		carbon dioxide					
			carbon monoxide					
	Byprodu	icts:						
			Section 11. Toxicolog	ical Informa	ation			
11.1	Informat		The toxicological effects of this prod	uct have not beer	thoroughly st	udied.		
		gical Effects:						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
2150	55-21-3	1-Myristoyl-3-Ole	oyl-rac-glycerol	n.a.	n.a.	n.a.	n.a.	
			Section 12. Ecologic	al Informat	ion			
12.1	Toxicity		Section 12. Ecologic Avoid release into the environment.	al Informat	ion			
12.1	Toxicity							
12.1 12.2	Toxicity: Persiste		Avoid release into the environment.					
	-	nce and	Avoid release into the environment. Runoff from fire control or dilution wa					
	Persiste	nce and bility:	Avoid release into the environment. Runoff from fire control or dilution wa					
12.2	Persiste Degrada	nce and bility: mulative	Avoid release into the environment. Runoff from fire control or dilution wa No data available.					
12.2	Persiste Degrada Bioaccu	nce and bility: mulative I:	Avoid release into the environment. Runoff from fire control or dilution wa No data available.					
12.2 12.3	Persiste Degrada Bioaccu Potentia Mobility	nce and bility: mulative I: in Soil:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available.					
12.2 12.3 12.4	Persiste Degrada Bioaccu Potentia Mobility	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available.					
12.2 12.3 12.4	Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available.					
12.2 12.3 12.4 12.5	Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available.	ater may cause po	ollution.			
12.2 12.3 12.4 12.5	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available.	ater may cause po	ollution.			
12.2 12.3 12.4 12.5 12.6	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB hent: Iverse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB hent: Iverse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T DOT Prope	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard	nce and bility: mulative l: in Soil: of PBT and vPvB hent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: hber:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause po Consideration	OIIution.			
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A U	Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class: nber: RANSPORT (Euro hipping Name:	Avoid release into the environment. Runoff from fire control or dilution wa No data available. No data available. No data available. No data available. No data available. Section 13. Disposal Dispose in accordance with local, st Section 14. Transpo DOT): Not dangerous goods.	ater may cause po Consideration	OIIution.			



14.3 AIR TRANSPORT (ICAO/IATA): ICAO/IATA Shipping Name: N

ame: Not dangerous goods.

Additional Transport Information:

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

Section 15. Regulatory Information

CAS #	Hazardous Components (Chemical Name)		S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
215055-21-3	1-Myristoyl-3-Oleoyl-rac-glycerol		No	No	No	
CAS #	Hazardous Com	ponents (Chemical Name)	Other US EPA or S	State Lists	•	
215055-21-3	1-Myristoyl-3-Ole	oyl-rac-glycerol	CAA HAP,ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No			
Regulatory Information Statement:		This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation (EC) No.1272/2008.				
		Section 16. Oth	ner Informatio	า		
Revision Date:		08/09/2019				
Additional Info This Product:	rmation 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.				