

	Sectio	n 1. Identification of the Substa	ince/Mixture and o	f the Company/Ur	ndertaking		
.1	Product Code: Product Name: Synonyms:	3-(oleoyloxy)propane-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 Suppli	er of the Safety Data Sheet:					
	Company Name:	Cayman Chemical Com 1180 E. Ellsworth Rd. Ann Arbor, MI 48108	ipany				
	Web site address:	www.caymanchem.com					
	Information:	Cayman Chemical Com	ipany	+1 (734	4)971-3335		
1.4	Emergency telephor Emergency Contac	t: CHEMTREC Within US	er: CHEMTREC Within USA and Canada: CHEMTREC Outside USA and Canada:		+1 (800)424-9300 +1 (703)527-3887		
		Section 2. Ha	azards Identif	ication			
2.1	Classification of the	Substance or Mixture:					
2.2	Label Elements:						
	GHS Hazard Phras Based on evaluation GHS Precaution Pl No phrases apply. GHS Response Ph No phrases apply.	n of currently available data this su	bstance or mixture is	s not classifiable ac	cording to GHS.		
2.3	GHS Storage and I	ion 7 for Storage and Section 13 for	-		piratory tract.		
2.3	GHS Storage and I Please refer to Sect	ion 7 for Storage and Section 13 for alth Material may be irritating to ms: May be harmful by inhalatio	the mucous membr	anes and upper res absorption.	piratory tract.		
2.3	GHS Storage and I Please refer to Sect Adverse Human Hea	ion 7 for Storage and Section 13 for alth Material may be irritating to ms: May be harmful by inhalation May cause eye, skin, or res	the mucous membr n, ingestion, or skin piratory system irrita	anes and upper res absorption. ation.	piratory tract. been thoroughly investigate		
2.3	GHS Storage and I Please refer to Sect Adverse Human Hea Effects and Sympto	ion 7 for Storage and Section 13 for alth Material may be irritating to ms: May be harmful by inhalation May cause eye, skin, or res	the mucous membr n, ingestion, or skin piratory system irrita ge, the toxicological	anes and upper res absorption. ation. properties have not	been thoroughly investigate		
CAS	GHS Storage and I Please refer to Sect Adverse Human Hea Effects and Sympto	 ion 7 for Storage and Section 13 for alth Material may be irritating to ms: May be harmful by inhalation May cause eye, skin, or res To the best of our knowledge 	the mucous membr n, ingestion, or skin piratory system irrita ge, the toxicological	anes and upper res absorption. ation. properties have not	been thoroughly investigate		



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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	g A solid water stream may be inefficient.				
	Media:					
5.2	Flammable Properties an	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 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	Take steps to avoid release into the environment, if safe to do so.				
	Precautions:					
6.3	Methods and Material For 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:					



8.2.1 E (8.2.2 F F (7 (7 9.1 Ir F <i>f</i> <i>f</i> <i>f</i> <i>f</i> <i>f</i>	(Ventilation etc.): le Personal protection equipm Eye Protection: Si Protective Gloves: C Other Protective Clothing:La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N	Safety glasses Compatible chemical-resistant gloves ab coat IIOSH approved respirator, as conditions warrant. Do not take internally. Tacilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties Ction 9. Physical and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
(8.2.2 F F (V 0 9.1 Ir F <i>f</i> <i>f</i> <i>f</i> <i>f</i>	(Ventilation etc.): le Personal protection equipm Eye Protection: Si Protective Gloves: C Other Protective Clothing:La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa N Sec nformation on Basic Physical Physical States: Appearance and Odor: pH: Melting Point:	avels below recommended exposure limits. nent: Safety glasses Compatible chemical-resistant gloves ab coat IIOSH approved respirator, as conditions warrant. Do not take internally. accilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
8.2.2 F F C (V c 9.1 Ir F <i>f</i> K E	Personal protection equipm Eye Protection: Si Protective Gloves: C Other Protective Clothing:La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N <u>Sec</u> nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	hent: Safety glasses Compatible chemical-resistant gloves ab coat IIOSH approved respirator, as conditions warrant. No not take internally. facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties [] Gas [] Liquid [] Mo data. No data.
9.1 Ir F 9.1 F F F	Eye Protection: Si Protective Gloves: C Other Protective Clothing:La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Safety glasses Compatible chemical-resistant gloves ab coat IIOSH approved respirator, as conditions warrant. Do not take internally. Tacilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties Ction 9. Physical and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
F ((V c 9.1 Ir F <i>F</i> K E	Protective Gloves: C Other Protective Clothing:La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Compatible chemical-resistant gloves ab coat IIOSH approved respirator, as conditions warrant. Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
6 F (V 0 9.1 Ir F <i>4</i> F M E	Other Protective Clothing: La Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	ab coat IIOSH approved respirator, as conditions warrant. Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
F (V c 9.1 Ir F <i>F</i> K E	Respiratory Equipment N (Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	IIOSH approved respirator, as conditions warrant. Do not take internally. Gracilities storing or utilizing this material should be equipped with an eyewash and a safety show wash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties [] Gas [] Liquid [] Gas [] Liquid [] Gas [] Liquid [] Mo data. No data.
(V 0 9.1 Ir F <i>4</i> F N E	(Specify Type): Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Do not take internally. Facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
9.1 Ir <i>F</i> F N E	Work/Hygienic/Maintenan D ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid []Gas []Liquid []Gas []Liquid [X]Solid No data. No data.
9.1 Ir 9.1 F <i>F</i> R E	ce Practices: Fa W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Facilities storing or utilizing this material should be equipped with an eyewash and a safety show Vash thoroughly after handling. Io data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid []Gas []Liquid []Gas []Liquid [X]Solid No data. No data.
9.1 Ir F <i>F</i> N E	W N Sec nformation on Basic Physica Physical States: Appearance and Odor: pH: Melting Point:	Vash thoroughly after handling. lo data available. Ction 9. Physical and Chemical Properties cal and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
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F <i>1</i> F N E	nformation on Basic Physic Physical States: Appearance and Odor: pH: Melting Point:	al and Chemical Properties []Gas []Liquid [X]Solid A solid No data. No data.
F <i>1</i> F N E	Physical States: Appearance and Odor: pH: Melting Point:	[]Gas []Liquid [X]Solid A solid No data. No data.
/ F N E	Appearance and Odor: pH: Melting Point:	A solid No data. No data.
r N E	pH: Melting Point:	No data.
E	-	
	Boiling Point:	
F		No data.
	Flash Pt:	No data.
E	Evaporation Rate:	No data.
F	Flammability (solid, gas):	No data available.
E	Explosive Limits:	LEL: No data. UEL: No data.
١	Vapor Pressure (vs. Air or m	nm No data.
ŀ	Hg):	
١	Vapor Density (vs. Air = 1):	No data.
S	Specific Gravity (Water = 1):	: No data.
5	Solubility in Water:	No data.
5	Solubility Notes:	~10 mg/ml in DMF;
C	Octanol/Water Partition	No data.
C	Coefficient:	
ļ	Autoignition Pt:	No data.
0	Decomposition Temperature	e: No data.
١	Viscosity:	No data.
9.2 O	Other Information	
F	Percent Volatile:	No data.
Ν	Molecular Formula & Weight	nt: C55H104O6 861.4



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10.1	Reactivi	ty:	No data available.					
10.2	Stability	:	Unstable [] Stable [X]					
 10.3 Stability Note(s): Polymerization: 10.4 Conditions To Avoid: 		Note(s):	Stable if stored in accordance with information listed on the product insert. Will occur [] Will not occur [X] No data available.					
		ization:						
10.5 Incompatibility - Materials strong oxidizing agents								
To Avoid:								
10.6	Hazardo		carbon dioxide					
	Byprodu	osition or	carbon monoxide					
	Byprout		Caption 11 Tovicalogia		otion			
	1.6	•	Section 11. Toxicologica					
11.1	Informat	ion on gical Effects:	The toxicological effects of this product	nave not beel	n thoroughly st	udied.		
		-						
CAS	#	Hazardous Com	ponents (Chemical Name)	NTP	IARC	ACGIH	OSHA	
NA 1,2-Diheptadecan		1	,			1	1	
	NA	1,2-Diheptadecar	,	n.a.	n.a.	n.a.	n.a.	
	NA	1,2-Diheptadecar	,			n.a.	n.a.	
12.1	NA Toxicity:		oyl-3-rac-Oleoyl			n.a.	n.a.	
12.1			Section 12. Ecological	Informat	tion	n.a.	n.a.	
12.1 12.2		<u> </u>	Novi-3-rac-Oleoyl Section 12. Ecological Avoid release into the environment.	Informat	tion	n.a.	n.a.	
	Toxicity	nce and	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water	Informat	tion	n.a.	n.a.	
	Toxicity: Persiste Degrada	nce and	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water	Informat	tion	n.a.	n.a.	
12.2	Toxicity: Persiste Degrada	nce and bility: mulative	oyl-3-rac-Oleoyl Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available.	Informat	tion	n.a.	n.a.	
12.2	Toxicity: Persiste Degrada Bioaccu	nce and bility: mulative I:	oyl-3-rac-Oleoyl Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3	Toxicity: Persiste Degrada Bioaccu Potentia Mobility	nce and bility: mulative I: in Soil:	oyl-3-rac-Oleoyl Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3 12.4	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3 12.4	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. No data available. No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3 12.4 12.5	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3 12.4 12.5	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available.	Informat	tion	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Section 13. Disposal Composed	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative I: in Soil: of PBT and vPvB nent: Iverse effects:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad	nce and bility: mulative l: in Soil: of PBT and vPvB nent: lverse effects: isposal Method:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport Sort):	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity: 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:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport Sort):	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T	nce and bility: mulative l: in Soil: of PBT and vPvB hent: iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport Sort):	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D	Toxicity: 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: iverse effects: isposal Method: RANSPORT (US I r Shipping Name: d Class:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport Dott: Not dangerous goods.	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard N/NA Nun 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: nber:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 14. Transport Dott: Not dangerous goods.	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	
12.2 12.3 12.4 12.5 12.6 13.1 14.1 D U 14.1 A U	Toxicity: Persiste Degrada Bioaccu Potentia Mobility Results assessm Other ad Waste D LAND T OT Prope OT Hazard N/NA Nun LAND T	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: RANSPORT (Euro hipping Name:	Section 12. Ecological Avoid release into the environment. Runoff from fire control or dilution water No data available. Dispose in accordance with local, state, Section 13. Disposal Co Dispose in accordance with local, state, Section 14. Transport POT): Not dangerous goods.	Informat may cause p onsiderat and federal r	tion Follution.	n.a.	n.a.	



14.3 AIR TRANSPORT (ICAO/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 Com		nponents (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)	
NA	1,2-Diheptadeca	noyl-3-rac-Oleoyl	No	No	No	
CAS # Hazardous Com		ponents (Chemical Name)	Other US EPA or State Lists			
NA	1,2-Diheptadecanoyl-3-rac-Oleoyl		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:		03/23/2019				
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.				