SAFETY DATA SHEET



CalEster TS

Section 1. Identification

GHS product identifier	: CalEster TS
Product code	: 300411100316
Chemical name	: Synthetic Polyol Ester
Other means of identification	: Not available.
Product type	: Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Industrial applications: Synthetic Polyol Ester	
Uses advised against	Reason
None known.	

Supplier's details	: Calumet Refining, LLC 2780 Waterfront Pkwy E. Drive Suite 200 Indianapolis, IN 46214 USA Technical Services: 317-328-5660

Emergency telephone : 24 hr. CHEMTREC 1-800-424-9300 / International 1-703-527-3887

number

Section 2. Hazards identification

OSHA/HCS status	: While this material is not considered hazardous by the OSHA Hazard Communication
	Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	2
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Hazards not otherwise classified	: None known.

Section 3. Composition/information on ingredients

Substance/mixture Chemical name

: Substance

- : Synthetic Polyol Ester
- Other means of identification

CAS number

: Not available.

CAS number/other identifiers

: Not available.

Ingredient name	%	CAS number
Synthetic Polyol Ester	100	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	 Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: ₩ash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed		
Potential acute health effects		
Eye contact :	No known significant effects or critical hazards.	
Inhalation :	No known significant effects or critical hazards.	
Skin contact :	No known significant effects or critical hazards.	
Ingestion :	No known significant effects or critical hazards.	
Over-exposure signs/symptoms		
Eye contact :	No specific data.	
Inhalation :	No specific data.	
Skin contact :	No specific data.	
Ingestion :	No specific data.	

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
Special protective actions for fire-fighters	 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protec	tive equipment and emergency procedures	
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.	
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".	
Environmental precautions	: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).	
Methods and materials for containment and cleaning up		
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.	
Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Section 7. Handling and storage

Conditions for safe storage,	1	
including any incompatibilities		direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate
		containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure lin	<u>nits</u>			
Ingredient name			Exposure limits	
Synthetic Polyol Ester None.			None.	
Biological exposure indice None known.	<u>95</u>			
Appropriate engineering controls		ood general ventilation should be suffic	cient to control worker exposure to airborne	
Environmental exposure controls	th ca	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.		
Individual protection measured	<u>ires</u>			
Hygiene measures	ea Al W	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.		
Eye/face protection	as ga th	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.		
Skin protection				
Hand protection	W		omplying with an approved standard should be al products if a risk assessment indicates this is	
Body protection	pe	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Other skin protection	ba	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.		
Respiratory protection	ar re	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.		

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

<u>Appearance</u>					
Physical state	:	Liquid. [Viscous liquid.]			
Color	1	Clear. Colorless to light yellow.			
Odor	1	Odorless.			
Odor threshold	1	Not available.			
рН	1	Not available.			
Melting point/freezing point	1	Not available.			
Boiling point, initial boiling point, and boiling range	:	Not available.			
Flash point	1	Open cup: 249°C (480.2°F) [Cleveland]		
Evaporation rate	4	Not available.			
Flammability		Not available.			
Lower and upper explosion limit/flammability limit	:	Not available.			
Vapor pressure	1	Not available.			
Relative vapor density	4	Not available.			
Relative density	1	0.95			
Solubility(ies)	4	Media	Result		
		pold water hot water	Not soluble Not soluble		
Solubility in water	:	Not available.			
Partition coefficient: n- octanol/water	:	Not applicable.			
Auto-ignition temperature	:	Not available.			
Decomposition temperature	1	Not available.			
Viscosity	1	Kinematic (40°C (104°F)):	Kinematic (40°C (104°F)): 17 mm²/s (17 cSt)		
Flow time (ISO 2431)	1	Not available.			
Pour point	1	-65°C (-85°F)			
Particle characteristics		_			
Median particle size	1	Not applicable.			

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Synthetic Polyol Ester	LD50 Dermal LD50 Oral		>2000 mg/kg >5000 mg/kg	-

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation, Eye	es.
Potential acute health effects		
Eye contact	No known significant effects or critical hazards.	
Inhalation	No known significant effects or critical hazards.	
Skin contact	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Symptoms related to the phy	al, chemical and toxicological characteristics	
Eye contact	No specific data.	
Inhalation	No specific data.	
Skin contact	No specific data.	
Ingestion	No specific data.	
Delayed and immediate effect	and also chronic effects from short and long term exp	<u>osure</u>
<u>Short term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Long term exposure Potential immediate effects	Not available.	

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: 12/13/2022 Date of previous issue

Section 11. Toxicological information

Potential delayed effects	: Not available.
Potential chronic health eff	ects
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name		Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
, , , , , , , , , , , , , , , , , , , ,	N/A N/A		N/A N/A	N/A N/A	N/A N/A

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition: Not available.coefficient (Koc)

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
RCRA classification	: Not Regulated

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

U.S. Federal regulations	:	TSCA 8(a) CDR Exempt/Partial exemption: Not determined
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Not listed
Clean Air Act Section 602 Class I Substances	:	Not listed
Clean Air Act Section 602 Class II Substances	:	Not listed
DEA List I Chemicals (Precursor Chemicals)	:	Not listed
DEA List II Chemicals (Essential Chemicals)	:	Not listed
SARA 302/304		
Composition/information	<u>on i</u>	ngredients
No products were found.		
SARA 304 RQ	:	Not applicable.
SARA 311/312		
Classification	: N	lot applicable.
Composition/information	<u>on i</u>	ngredients
No products were found.		
State regulations		
Massachusetts		None of the components are listed.
New York		None of the components are listed.
New Jersey	:	None of the components are listed.
Pennsylvania	:	None of the components are listed.
<u>California Prop. 65</u>		
This product is not known to	o cor	tain California Prop 65 substances ≥1 ppm
International lists		
National inventory		
Australia	1	All components are listed or exempted.
Canada	1	All components are listed or exempted.
China	- 1	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory : All components are listed or exempted.
New Zealand	:	All components are listed or exempted.
Philippines	- :	All components are listed or exempted.
Date of issue/Date of revision		: 12/13/2022 Date of previous issue : 03/03/2020 Version : 4.01 8/9

Section 15. Regulatory information

-	
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: 🕅 components are active or exempted.
Viet Nam	: All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Clas	sification	Justification
Not classified.		
History		
Date of issue/Date of revision	: 12/13/2022	
Date of previous issue	: 03/03/2020	
Version	: 4.01	
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classificatio IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition co MARPOL = International Convention for the Prevent as modified by the Protocol of 1978. ("Marpol" = ma N/A = Not available SGG = Segregation Group UN = United Nations	befficient tion of Pollution From Ships, 1973

V Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.