

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ECOSE® Synthetic Motor Oil, SAE 0W-16
 ECOSE® Synthetic Motor Oil, SAE 0W-20
 ECOSE® Synthetic Motor Oil, SAE 5W-20
 ECOSE® Synthetic Motor Oil, SAE 5W-30
 ECOSE® Synthetic Motor Oil, SAE 10W-30

Other means of identification: Synthetic Motor Oil

SDS Number: 530208

CAS Number: Blend

CHEMTREC: 1-800-424-9300 (For emergencies)

Supplier:

Nu-Tier Brands, Inc.
 8282 S. Memorial Dr., Suite 302
 Tulsa, OK 74133
 1-877-771-5823 (For Product Information)
 www.nu-tierbrands.com

2. HAZARDS IDENTIFICATION

Classified Hazards

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Other Hazards

None Known

Label Elements

No classified hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	Concentration
Distillates, petroleum, hydrotreated heavy paraffinic	64742-54-7	>80%
Non-Hazardous material	Various	<20%

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.

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

4. FIRST AID MEASURES

INHALATION FIRST AID: If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

SKIN CONTACT FIRST AID: Wash with soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if needed.

EYE CONTACT FIRST AID: Flush with water for several minutes. If effects occur, consult a physician.

INGESTION FIRST AID: Rinse mouth with water. If symptoms develop, obtain medical attention.

5. FIREFIGHTING MEASURES

NFPA 704 Hazard Class

Health: 1 **Flammability:** 1 **Instability:** 0



0 (Minimal)
 1 (Slight)
 2 (Moderate)
 3 (Serious)
 4 (Severe)

Flash Point Minimum: 399°F / 204°C
Flash Point Test Method: Cleveland Open Cup (COC)



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Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F/100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Specific hazards arising from the chemical:

Unusual Fire & Explosion Hazards: This material may burn, but will not ignite readily. If container is not properly cooled, it can rupture in the heat of a fire.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of sulfur, nitrogen or phosphorus may also be formed.

Special protective actions for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant.

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Clean Up:

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Exposure Controls/Personnel Protection. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal. Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see Section 15: Regulatory Information.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

Keep away from sparks and flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion proof equipment. When transferring large volumes of products, metal containers, including trucks and tank cars, should be grounded and bonded. This product has a low vapor pressure and is not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, do not breathe the vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

INCOMPATIBILITIES:

Oxidizing materials, acids.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH	OSHA	Other
Distillates, petroleum, hydrotreated heavy paraffinic	TWA: 5mg/m ³ STEL: 10mg/m ³ As Oil Mist, if Generated	TWA: 5mg/m ³ As Oil Mist, if Generated	



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Note: State, local, or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

Engineering controls: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

Eye/Face Protection: The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Skin/Hand Protection: The use of skin protection is not normally required; however, good industrial hygiene practice suggests the use of gloves or other appropriate skin protection whenever working with chemicals. Suggested protective materials: Nitrile

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Air purifying respirators provide limited protection and cannot be used in atmospheres that exceed the maximum use concentration (as directed by regulation or the manufacturer's instructions), in oxygen deficient (less than 19.5 percent oxygen) situations, or under conditions that are immediately dangerous to life and health (IDLH).

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Data represents typical values and are not intended to be specifications.

Appearance:	Amber	Flash Point:	>365°F / >185°C
Physical State:	Liquid	Test Method:	Cleveland Open Cup, ASTM D92
Odor:	Petroleum	Initial Boiling Point:	475°F (246°C) (minimum)
Odor Threshold:	No data	Vapor Pressure:	<1 mm Hg @ 68°F (20°C)
pH:	Not applicable	Partition Coefficient (n-octanol/water) (Kow):	No data
Upper Explosive Limits:	No data (vol % in air)	Melting/Freezing Point:	No data
Lower Explosive Limits:	No data (vol % in air)	Auto-ignition Temperature:	No data
Evaporation Rate:	No data (nBuAc=1)	Specific Gravity:	0.88 @ 68°F (20°C) (water=1)
Viscosity:	>20.5 mm ² /s @ 104°F (40°C)	Bulk Density:	7.3 lbs/gal (880 g/l)
Solubility:	Insoluble		

10. STABILITY AND REACTIVITY

REACTIVITY: Not chemically reactive.

CHEMICAL STABILITY: Stable under normal ambient and anticipated conditions of use.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous reactions not anticipated.

CONDITIONS TO AVOID: Avoid all possible sources of ignition. Extended exposure to high temperatures can cause decomposition.

INCOMPATIBLE MATERIALS: Avoid contact with strong oxidizing agents and strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Not anticipated under normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	Hazard	LC50/LD50 Data	Additional Information
Inhalation	Unlikely to be harmful	>5 mg/L (mist, estimated)	
Dermal	Unlikely to be harmful	>2 g/kg (estimated)	
Oral	Unlikely to be harmful	>5 g/kg (estimated)	

Aspiration Hazard: Not expected to be an aspiration hazard.

Skin Corrosion/Irritation: Not expected to be irritating. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Not expected to be irritating.

Skin Sensitization: No information available on the mixture, however none of the components have been classified for skin sensitization (or are below the concentration threshold for classification.)

Respiratory Sensitization: No information available.

Specific Target Organ Toxicity (Single Exposure): No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

Specific Target Organ Toxicity (Repeated Exposure): No information available on the mixture, however none of the components have been classified for target organ toxicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however none of the components have been classified for carcinogenicity (or are below the concentration threshold for classification).

Germ Cell Mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

12. ECOLOGICAL INFORMATION

Toxicity: All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

Mobility in Soil: Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.

Other Adverse Effects: None anticipated.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.

This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, this product can be managed in accordance with the used oil exemption under 40 CFR Part 279. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

14. TRANSPORTATION INFORMATION

Emergency Response Guide Number: Not applicable

DOT Shipping Name: Not regulated as a hazardous material for transportation.

TDG Shipping Name: Not regulated as a dangerous good for transportation

15. REGULATORY INFORMATION

Volatile Organic Compounds (As Regulated): Negligible; As per 40 CFR Part 51.100(s)

Federal Regulations

SARA 302/304

Component Analysis: Based on the ingredient(s) listed in SECTION 3, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.



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SARA 311/312 Hazardous Categories

Acute Health: No Chronic Health: No Fire: No Pressure: No Reactive: No

SARA Section 313

Component Analysis: This product contains a "toxic" chemical subject to the requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Zinc alkyldithiophosphate (Not available) 1.0% de minimis concentration (related to Zinc compounds)
Phosphorodithioic acid, O, O-di-C1-14 alkyl esters, 1.0% de minimis concentration (related to Zinc compounds)
Zinc salts (68649-42-3)

CERCLA

Component Analysis: Based on the ingredient(s) listed in SECTION 3, this product does not contain any "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

TSCA Inventory: All of the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on the TSCA Inventory.

U.S. State Regulations: None of this product's components are listed on the state lists from CA, MA, MN, NJ, or PA.

No component(s) are listed under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

Canadian Regulations: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

Canadian WHMIS Information: Not regulated.

Component Analysis – WHMIS IDL: Not regulated.

16. OTHER INFORMATION

The data in this Safety Data Sheet relates only to the specific material designated herein.

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Nu-Tier Brands, Inc. The data on this sheet are related only to the specific material designated herein. Nu-Tier Brands, Inc. assumes no legal responsibility for use or reliance upon these data.

END OF SDS