

SDS - Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ECOSE® Horizon HD Mono-Grade Engine Oil, 10W
 ECOSE® Horizon HD Mono-Grade Engine Oil, 30
 ECOSE® Horizon HD Mono-Grade Engine Oil, 40
 ECOSE® Horizon HD Mono-Grade Engine Oil, 50

Other means of identification: Engine Oil

SDS Number: 531301

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, solvent-refined heavy paraffinic	64741-88-4	<90%
Distillates, petroleum, hydrotreated heavy paraffinic	64742-54-7	<80%
Distillates, petroleum, solvent-dewaxed heavy paraffinic	64742-65-0	<40%
Residual oils, petroleum, solvent-dewaxed	64742-62-7	<30%
Non-Hazardous Materials	Various	<15%

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 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: 390°F / 200°C



Horizon HD Mono-Grade Engine Oils

SDS - Safety Data Sheet

Flash Point Test Method: Cleveland Open Cup (COC)

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 (see Section 8).

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.

See Section 9 for Flammable Property Including Flash Point

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. Wear protective equipment and provide engineering controls as specified in **Section 8: Exposure Controls/Personal Protection**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

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 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.



Horizon HD Mono-Grade Engine Oils

SDS - Safety Data Sheet

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH	OSHA	Other
Distillates, petroleum, solvent-refined heavy paraffinic	TWA: 5mg/m ³ STEL: 10mg/m ³ As Oil Mist, if Generated	TWA: 5mg/m ³ As Oil Mist, if Generated	
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	
Distillates, petroleum, solvent- dewaxed heavy paraffinic	TWA: 5mg/m ³ STEL: 10mg/m ³ As Oil Mist, if Generated	TWA: 5mg/m ³ As Oil Mist, if Generated	
Residual oils, petroleum, solvent-dewaxed	TWA: 5mg/m ³ STEL: 10mg/m ³ As Oil Mist, if Generated	TWA: 5mg/m ³ As Oil Mist, if Generated	

COMPONENT EXPOSURE LIMITS:

ACGIH, OSHA, and NIOSH have not developed exposure limits for any of this product's components.

APPROPRIATE ENGINEERING CONTROLS:

Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

INDIVIDUAL PROTECTIVE MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to regulatory requirements. The following PPE should be considered the minimum required: safety glasses, gloves, lab coat, or apron.

EYE/FACE PROTECTION:

Safety glasses with side shields should be worn at a minimum. Additional protection such as goggles, face shields, or respirators may be needed depending upon anticipated use and concentrations of mists or vapors. Provide an emergency eye wash fountain and quick drench shower in the immediate work area. Contact lens use is not recommended.

SKIN PROTECTION:

Where skin contact is likely, wear gloves impervious to product; use of natural rubber (latex) or equivalent gloves is not recommended. When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

RESPIRATORY PROTECTION:

No respirator is required under normal conditions of use. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

9. PHYSICAL AND CHEMICAL PROPERTIES

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance: Amber, transparent

Physical State: Liquid

Odor: Petroleum

Odor Threshold: No data

pH: Not applicable

Vapor Density: >1 (air = 1)

Upper Explosive Limits: No data (vol % in air)

Lower Explosive Limits: No data (vol % in air)

Evaporation Rate: <1 (nBuAc=1)

Particle Size: No applicable

Viscosity: 6.0-16.3 cSt @ 100°C

Solubility: Negligible

Flash Point: >390°F / >200°C

Test Method: Cleveland Open Cup, ASTM D92

Initial Boiling Point/Range: No data

Vapor Pressure: <1 mm Hg

Partition Coefficient (n-octanol/water) (Kow): No data

Melting/Freezing Point: No data

Auto-ignition Temperature: No data

Decomposition Temperature: No data

Specific Gravity: 0.87 – 0.895 @ 60°F (15.6°C) (water=1)

Bulk Density: 7.26 – 7.4 lbs/gal

Percent Volatile: Negligible

Flammability (solid, gas): Not applicable



Horizon HD Mono-Grade Engine Oils

SDS - Safety Data Sheet

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: Causes mild skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious Eye Damage/Irritation: Causes mild eye irritation.

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).

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

Cardinogenicity

Component Carcinogenicity: None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

Germ Cell Mutagenicity: No information available for the product.

Teratogenicity: No information available for the product.

Reproductive Effects: No epidemiological data is available for this product.

Specific Target Organ Effects – Single Exposure: No information on significant adverse effects.

Specific Target Organ Effects – Repeated Exposure: No information on significant adverse effects.

Aspiration Hazard: No data available.

Medical Conditions Aggravated by Exposure: Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, kidney, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

12. ECOLOGICAL INFORMATION

Toxicity: Harmful to aquatic life, may cause long-term adverse effects in the aquatic environment.

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.



Horizon HD Mono-Grade Engine Oils

SDS - Safety Data Sheet

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.

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.



Horizon HD Mono-Grade Engine Oils

SDS - Safety Data Sheet

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