

SDS - Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: ECOSE® Synthetic All Season TO-4 Oil
Other means of identification: Heavy Duty Transmission Fluid
SDS Number: 531900
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

GHS Phrases:
 H318 – Causes serious eye irritation

GHS Precautionary Statements:
 P305+351+338 – IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Keep out of reach of children.
 Read label before use.
 If medical advice is needed, have product container or label at hand.
 Wash with plenty of soap and water.

Label Elements



GHS Signal Word:
 WARNING
GHS Classifications:
 Health, Serious eye damage/Eye irritation, 2 A

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS	Concentration
Synthetic base oil	Mixture	50-90%
Additives	Proprietary	<15%
Phosphorodithioic acid, -alkyl esters, zinc salts	Proprietary	0.5 – 5%

Any concentration shown as a range is to protect the confidentiality of formulation which is considered a trade secret.

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: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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: 464°F / 240°C
Flash Point Test Method: COC, ASTM D92



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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 (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

SAFEGUARDS (PERSONNEL):

Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction.

INITIAL CONTAINMENT:

Absorb spills with inert material. Do not allow material to enter soil or surface water.

LARGE SPILLS PROCEDURE:

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Do not flush to sewer.

SMALL SPILLS PROCEDURE:

Absorb spills with inert material.

MISCELLANEOUS:

Treat or dispose of in accordance with all federal, state, and local requirements. Incineration is preferred.

7. HANDLING AND STORAGE

HANDLING (PERSONNEL):

DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of. Wash hands thoroughly after handling.

HANDLING (PHYSICAL ASPECTS):

Secure container after each use. Store in a cool dry area.

Avoid contact with strong oxidizing agents.

STORAGE PRECAUTIONS:

Store in a cool dry place, in a tightly closed container. Eliminate all sources of ignition - heat, sparks, flame, electricity, impact and friction.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH	OSHA	NIOSH
Lubricating Oil, Petroleum			TWA: 5mg/m ³ STEL: 10mg/m ³
Oil Mist, Mineral	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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ENGINEERING CONTROLS:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. TLV for mineral oil is 5 mg/cubic meter.

EYE / FACE PROTECTION REQUIREMENTS:

When splashing of the material may occur, chemical goggles and/or a face shield are recommended.

SKIN PROTECTION REQUIREMENTS:

Where contact is likely, wear chemical resistant gloves.

RESPIRATORY PROTECTION REQUIREMENTS:

Under normal use conditions, with adequate ventilation, no special handling equipment is required. If mists are produced, local ventilation may be required to keep exposure below limits.

GENERAL COMMENTS:

Always observe good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, etc..

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance:	Amber
Physical State:	Liquid
Viscosity:	14.4 cSt @ 100°C
Bulk Density:	7.2 lbs/gal @ 60°F
Specific Gravity:	0.86 @ 60°F (water = 1)
Solubility in water:	Nil
Flash Point (Typical):	>464°F / >240°C
Test Method:	COC, ASTM D92

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

GENERAL INFORMATION:

Based on data on the components and the toxicology of similar materials.

ROUTES OF ENTRY:

Skin, Eyes, Ingestion, and Inhalation.

ACUTE EXPOSURE:

EYE IRRITATION:

Not expected to cause eye irritation. Based on data from components or similar materials.

Vapors may cause irritation.

SKIN IRRITATION:

Slightly irritating based on data from components or similar materials. Prolonged or repeated skin contact without proper hygiene may result in skin disorders such as acne.



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RESPIRATORY IRRITATION:

Based on data from components and similar materials, Inhalation of vapors or mists may cause irritation.

DERMAL TOXICITY:

Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit

ORAL TOXICITY:

Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat

INHALATION TOXICITY:

Based on data from components and similar materials, product is not considered to be an inhalation hazard under normal conditions of use.

SENSITIZATION:

Component concentrations in this formulation would not be expected to cause skin sensitization, based on tests of the components or similar formulations.

CHRONIC EXPOSURE:**CHRONIC TOXICITY:**

No data available to indicate product or components present at greater than 1% are chronic health hazards.

CARCINOGENICITY:

Product contains mineral and/or synthetic oils shown to be noncarcinogenic in laboratory studies with the same or similar materials. Mineral and synthetic oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.

MUTAGENICITY:

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

REPRODUCTIVE TOXICITY:

No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

TERATOGENICITY:

No data available to indicate either product or components present at greater than 0.1% that may cause birth defects.

ADDITIONAL INFORMATION:

No other health hazards known.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS:

Ecological Toxicity data has not been determined specifically for this product. The ecological toxicity hazard is based on an evaluation of data for the components or a similar material. This material is expected to be harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material. This product contains components which may be persistent in the environment.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.
Do not flush to surface water or drains.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL: **ECOSE® Synthetic All Season TO-4 Oil**

D.O.T SHIPPING: Not Regulated by DOT.

IMDG: This material is not classified as dangerous under IMDG regulations.

IATA: This material is not classified as dangerous under IATA regulations.

TRANSPORT CANADA: This material is not classified as dangerous under Transport Canada regulations.



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15. REGULATORY INFORMATION

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).

16. OTHER INFORMATION

The data in this Material 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 MSDS