

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** ECOSE® AW-HD Hydraulic Fluid 100, 150, 220, 320

**Other means of identification:** Antiwear Hydraulic Fluid

**SDS Number:** 534400

**CAS Number:** Blend

**CHEMTREC:** EMERGENCY CONTACT 1-800-424-9300

**Supplier:**

Nu-Tier Brands, Inc., Tulsa, OK

TECHNICAL CONTACT NUMBER: 918-550-8026, Ext. 507

www.nu-tierbrands.com

### 2. HAZARDS IDENTIFICATION

**OSHA/HCS status:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Classification of the substance or mixture:** SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2A

**GHS label elements**

**Hazard pictograms:**



**Signal word:** Warning

**Hazard statements:** Causes serious eye irritation.

**Precautionary statements**

**General:** Keep out of reach of children.

**Prevention:** Wear eye or face protection. Wash hands thoroughly after handling.

**Response:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

**Storage:** Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.

**Disposal:** Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise**

**Classified:** None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/mixture:** Mixture

**Other means of identification:** Heavy duty hydraulic fluid

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	≥75 - ≤90	64742-54-7
Residual oils (petroleum), solvent-dewaxed	≥10 - ≤25	64742-62-7
Zinc and zinc compounds	0.5 – 1.5	68649-42-3

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### 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: 0      Instability: 0



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

**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

Contain spilled material.  
Collect in suitable and properly labeled containers.  
Pick up excess with inert absorbent material.  
Keep away from drains and ground water.

### 7. HANDLING AND STORAGE

**HANDLING PRECAUTIONS:**

Avoid contact with eyes, skin, or clothing.  
Keep away from sources of ignition.  
Handle with care and avoid spillage on the floor (slippage).

**STORAGE REQUIREMENTS:**

Keep away from sources of ignition.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:**

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

**PERSONAL PROTECTIVE EQUIPMENT:**

Use of safety glasses and gloves are recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance: Amber  
Physical State: Liquid  
Viscosity: 10-25 cSt @ 100°C; 95-330 cSt @ 40°C  
Solubility: Nil in water  
Flash Point: >400°F / >204°C

### 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

#### Information on toxicological effects

##### Acute toxicity

**Conclusion/Summary:** **Distillates (petroleum), hydrotreated heavy paraffinic:** Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

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##### Irritation/Corrosion

**Skin:** No additional information

**Eyes:** No additional information

**Respiratory:** No additional information

##### Sensitization

**Skin:** No additional information

**Respiratory:** No additional information

##### Mutagenicity

**Conclusion/Summary:** No additional information

##### Carcinogenicity

**Conclusion/Summary:** No additional information

##### Reproductive toxicity

**Conclusion/Summary:** No additional information

##### Teratogenicity

**Conclusion/Summary:** No additional information

##### 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: Dermal

##### Potential acute health effects

**Eye contact:** No known significant effects or critical hazards

## SDS - Safety Data Sheet

**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 physical, chemical and toxicological characteristics**

**Eye contact:** No specific data  
**Inhalation:** No specific data  
**Skin contact:** No specific data  
**Ingestion:** No specific data

**Potential chronic health effects**

**General:** No known significant effects or critical hazards  
**Carcinogenicity:** No known significant effects or critical hazards  
**Mutagenicity:** No known significant effects or critical hazards  
**Teratogenicity:** No known significant effects or critical hazards  
**Developmental effects:** No known significant effects or critical hazards  
**Fertility effects:** No known significant effects or critical hazards

### 12. ECOLOGICAL INFORMATION

**Toxicity**

**Conclusion/Summary:** Not available

**Persistence and degradability**

**Conclusion/Summary:** Not available

**Bioaccumulative potential:** Not available

**Mobility in soil**

**Soil/water partition coefficient (K<sub>oc</sub>):** Not available

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

### 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:**

Dispose 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.

These products, if discarded, are not expected to be a characteristic or listed hazardous waste. If recycled as used oil in the USA, they 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 these products.

### 14. TRANSPORTATION INFORMATION

**Emergency Response Guide Number:** Not applicable.  
**DOT Shipping Name:** Not regulated as a hazardous material.  
**TDG Shipping Name:** Not regulated as a dangerous good.

### 15. REGULATORY INFORMATION

**Volatile Organic Compounds (As Regulated):**  
 Negligible as per U.S EPA 40 CFR 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.



# AW-HD Hydraulic Oils

## SDS - Safety Data Sheet

### SARA 311/312 Hazardous Categories:

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

### SARA Section 313

#### Component Analysis:

This product does not contain any "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.

### 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 the components of these products 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

These products have been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all information required by the CPR.

## 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