

Signature® AW Hydraulic 100 Oil

Safety Data Sheet



SECTION 1 IDENTIFICATION

Product Name: Signature® AW Hydraulic 100

Distributor Information:

Parman Energy Corporation
7101 Cockrill Bend Blvd
Nashville, TN 37209
(800) 727-7920

Product Use: Hydraulic Oil

Emergency Phone Number:

PERS (800) 633-8253

SECTION 2 HAZARD(S) IDENTIFICATION

Classification: Not classified as hazardous according to 29 CFR 1910.1200 (2012).

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS Number	Amount
Highly refined mineral oil (C15 – C50)	Mixture	60 - 100 % weight

SECTION 4 FIRST-AID MEASURES

Inhalation: No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Skin: No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated.

Eye Contact: No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

Ingestion: No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

Immediate Symptoms and Effects:

Inhalation: Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

Skin: Contact with the skin is not expected to be harmful. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

Eye: Not expected to cause prolonged or significant eye irritation.

Ingestion: Not expected to be harmful if swallowed.

Delayed or other Health Effects: Not Classified.

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Safety Data Sheet



Indication of any immediate medical attention and special treatment needed

Note to Physicians: In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

SECTION 5 FIRE-FIGHTING MEASURES

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

Extinguishing Media

Suitable: Use water, fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Protection for Fire Fighters:

Fire-Fighting Instructions: This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

General Handling Information: Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

Precautionary Measures: DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed. Keep out of the reach of children.

Static hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.10, "Flammable and Combustible Liquids", National

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Fire Protection Association (NFPA 77, "Recommended Practice on Static Electricity", and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents")

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. 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 containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

General Considerations:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Engineering Controls: Use in a well-ventilated area.

Personal Protective Equipment:

Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

Skin and Body Protection: No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

Respiratory Protection: Determine if airborne concentrations are below the recommended occupational exposure limits for jurisdiction of use. If airborne concentrations are above the acceptable limits, wear an approved respirator that provides adequate protection from this material, such as: No respiratory protection is normally required. If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Consult local authorities for appropriate values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Brown

Physical State: Liquid

Odor: Petroleum odor

Odor Threshold: No data available

pH: Not applicable

Vapor Pressure: <0.01 mmHg @ 37.8°C (100°F)

Vapor Density (Air = 1): >1

Initial Boiling Point: 315°C (599°F)

Solubility: Soluble in hydrocarbon; insoluble in water.

Freezing Point: Not applicable

Density: 0.86 kg/l – 0.9 kg/l @ 15°C (59°F)

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Safety Data Sheet



Viscosity: 90 cSt @ 40°C (104°F) (Min)
Evaporation Rate: No data available
Decomposition temperature: No data available
Octanol/Water Partition Coefficient: No data available

Flammable Properties:

Flammability (solid, gas): No data available
Flash Point: (Cleveland Open Cup) 232°C (450°F) Minimum
Auto-ignition temperature: No data available
Flammability (Explosive) Limits (% by volume in air): Lower: Not applicable Upper: Not applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity: This material is not expected to react.

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: None known (None expected)

Hazardous Polymerization: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Serious Eye Damage/Irritation: The eye irritation hazard is based on evaluation of data for product components.

Skin Corrosion/Irritation: The skin irritation hazard is based on evaluation of data for product components.

Skin Sensitization: The skin sensitization hazard is based on evaluation of data for product components.

Acute Dermal Toxicity: The acute dermal toxicity hazard is based on evaluation of data for product components.

Acute Oral Toxicity: The acute oral toxicity hazard is based on evaluation of data for product components.

Acute Inhalation Toxicity: The acute inhalation toxicity hazard is based on evaluation of data for product components.

Acute Toxicity Estimate: Not determined.

Germ Cell Mutagenicity: The hazard evaluation is based on data for components or a similar material.

Carcinogenicity: The hazard evaluation is based on data for components or a similar material.

Reproductive Toxicity: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity – Single Exposure: The hazard evaluation is based on data for components or a similar material.

Specific Target Organ Toxicity – Repeated Exposure: The hazard evaluation is based on data for components or a similar material.

Additional Toxicology Information:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

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Safety Data Sheet



This material is not expected to be harmful to aquatic organisms. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material. The product has not been tested. The statement has been derived from the properties of the individual components.

Mobility:

No data available.

Persistence and Degradability:

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. The product has not been tested. The statement has been derived from the properties of the individual components.

Potential to Bioaccumulate

Bioconcentration Factor: No data available

Octanol/Water Partition Coefficient: No data available

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not applicable

SECTION 15 REGULATORY INFORMATION

EPCRA 311/312 CATEGORIES

1. Immediate (Acute) Health Effects: No
2. Delayed (Chronic) Health Effects: No
3. Fire Hazard: No
4. Sudden Release of Pressure Hazard: No
5. Reactivity Hazard: No

REGULATORY LISTS SEARCHED

01-1=IARC Group 1

01-2A=IARC Group 2A

01-2B=IARC Group 2B

02=NTP Carcinogen

03=EPCRA 313

04=CA Proposition 65

05=MA RTK

06=NJ RTK

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Safety Data Sheet



07=PA RTK

No components of this material were found on the regulatory lists above.

Chemical Inventories:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canda), EINECS (European Union), ENCS (Japan), IECSC (China), KECI (Korea), PICCS (Philippines), TSCA (United States).

New Jersey RTK Classification:

SECTION 16 OTHER INFORMATION

NFPA Ratings

NFPA Health Hazard 0
NFPA Fire Hazard 1
NFPA Reactivity 0

HMIS Rating

HMIS Health Hazard 0
HMIS Fire Hazard 1
HMIS Reactivity 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

Label Recommendation:

Label Category: INDUSTRIAL OIL 1 – IND1

Revision Statement: This revision updates the following sections of this Safety Data Sheet 1-16

Revision Date: May 8, 2015

Abbreviations that may have been used in this document:

TLV – Threshold Limit Value	TWA – Time Weighted Average
STEL – Short-term Exposure Limit	PEL – Permissible Exposure Limit
GHS – Globally Harmonized System	CAS – Chemical Abstract Service Number
ACGIH – American Conference of Governmental Industrial Hygienists	IMO/IMDG – International Maritime Dangerous Goods Code
API – American Petroleum Institute	SDS – Safety Data Sheet
HMIS – Hazardous Materials Information System	NFPA – National Fire Protection Association (USA)
DOT – Department of Transportation (USA)	NTP – National Toxicology Program (USA)
IARC – International Agency for Research on Cancer	OSHA – Occupational Safety and Health Administration
NCEL – New Chemical Exposure Limit	EPA – Environmental Protection Agency
SCBA – Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Parman Energy

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May 2015