

**Safety data sheet**  
**according to 1907/2006/EC (REACH),**  
**1272/2008/EC (CLP), and OSHA GHS**

Revision: 24 April 2018

### SECTION 1 PRODUCT AND COMPANY INFORMATION

Product Name(s): **FRAM AW 46 HYDRAULIC OIL**  
Product Code(s): 848104682  
Uses: A petroleum-based lubricant.  
Company: AOCUSA  
Address: 1601 McCloskey Boulevard Tampa, Florida 33605 U.S.A.  
Telephone Number: (813) 248-1988 Fax Number: (813) 248-1488  
Emergency Telephone Number: For Hazardous Materials [or Dangerous Goods] Incident (24 hours/day)  
ChemTel Inc. (800) 255-3924; +1 (813) 248-0585  
Date Issued: August 30, 2018 Date Revised: August 30, 2018  
This SDS complies with the OSHA Hazard Communication Standard 29CFR1910.1200 as revised in May 2012 (GHS). It may not meet requirements in other countries.

### SECTION 2 HAZARDS IDENTIFICATION

GHS Signal Word: None.  
GHS Classification: Not classified as hazardous  
GHS Hazard Statements: None.  
GHS Precautionary Statements: Prevention: None. Response: None.  
Storage: None. Disposal: None.  
Hazards Not Otherwise Classified: None.  
GHS Assessment: Approximately 0% of this mixture consists of ingredient(s) of unknown acute toxicity.  
Approximately 0% of the mixture consists of ingredient(s) of unknown hazards to the aquatic environment.

### SECTION 3 COMPOSITION / INGREDIENTS

Component	CAS Number	EC Number	Concentration
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	265-157-1	85.0 - 99.9%
	<i>Classification: Carc. 1B: H350 (*)</i> <i>Carc. 1B; H350: C ≥ 3.0 % DMSO</i> <i>Repr. 2; H361d: C ≥ 3.0 % DMSO</i> <i>Asp. Tox. 1; H304: Viscosity ≤ 20.5 mm<sup>2</sup>/s (40°C)</i>		

Note (\*): Components are highly refined and this hazard does not apply.

Other components are either non-hazardous or do not significantly contribute to the hazards of the product.

Trade Secret Claims: Specific chemical identity and/or exact percentage (concentration) of components has been withheld as a trade secret.

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4 FIRST AID MEASURES

- First Aid - Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention, if irritation develops.
- First Aid - Skin: In case of contact, flush skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention immediately if irritation develops and/or persists. Wash contaminated clothing before reuse.
- First Aid - Ingestion: If swallowed and feel unwell, immediately call a physician or poison control center. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.
- First Aid - Inhalation: If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, clear airway and immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.
- Important Symptoms / Effects – Acute and Delayed: Mild tissue inflammation, nausea.
- Advice to Physician: Treat symptomatically.

### SECTION 5 FIRE FIGHTING MEASURES

- Extinguishing Media: Treat surrounding material. Water spray, dry chemical, carbon dioxide, or foam is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.
- Specific Hazards: This product is not flammable, but will burn in a fire. This product may give rise to hazardous vapors in a fire. Vapors/fumes may be irritating, corrosive and/or toxic.
- Protective equipment and procedures for fire-fighters. Wear full protective clothing and self-contained breathing apparatus.
- Additional Advice: None.

### SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spill Procedures: Small spills: Wipe up spills with an absorbent towel/material and transfer into suitable containers for recovery or disposal. Finally flush area with water/soap or an appropriate solvent, as this product is not appreciably

## SECTION 6 ACCIDENTAL RELEASE MEASURES

soluble in water alone.

Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers.

Personal Precautions: Wear suitable protective clothing and equipment.

Environmental Precautions: Prevent the material from entering drains or water courses. Do not discharge directly to a water source. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.

## SECTION 7 HANDLING AND STORAGE

Handling: Wear appropriate personal protection (See Section 8) when handling this material. The work area should be equipped with a safety shower and eye wash station. If exposed to the liquid, avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapors, mists or sprays. Use in a well-ventilated area.

Storage: Keep container(s) tightly closed. Use and store this material at room temperature away from sources of ignition, heat, direct sunlight and hot metal surfaces. Keep away from any incompatible materials (see Section 10).

Additional Advice: Store in original container. Store as directed by the manufacturer.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Standards: Exposure limits are listed below, if they exist.

Petroleum distillates,  
hydrotreated heavy  
paraffinic:

(as petroleum distillates – naphtha)  
NIOSH REL: 350 mg/m<sup>3</sup> TWA.  
NIOSH REL: 1800 mg/m<sup>3</sup> STEL.  
OSHA PEL: 500 ppm (2000 mg/m<sup>3</sup>).  
(as oil mist)  
NIOSH REL: 5 mg/m<sup>3</sup> TWA.  
NIOSH STEL: 10 mg/m<sup>3</sup> TWA.  
OSHA PEL: 5 mg/m<sup>3</sup> TWA.

Engineering Control Measures: Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process conditions.

Respiratory Protection: A NIOSH certified self-contained breathing apparatus or air purifying respirator with an organic cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits.

Hand Protection: The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation and skin damage (see glove manufacturer literature for information on permeability).

Eye Protection: Approved eye protection (safety glasses with side-shields or goggles) to safeguard against potential eye contact, irritation, or injury is recommended. Depending on conditions of use, a face shield may be necessary.

Body Protection: Impervious clothing should be worn as needed to prevent skin contact.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: Clear to pale amber

Odor: Characteristic

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Odor Threshold:	Not available.
pH:	Not available.
Melting Point/Range (°C/°F):	-27°C / -16.6°F (pour point)
Boiling Point/Range (°C/°F):	> 200°C / 392°F (based on constituents)
Flash Point (PMCC) (°C/°F):	200°C / 392°F
Evaporation Rate:	Not available.
Flammability / Explosivity Limits in Air (%):	Not available.
Vapor Pressure:	< 0.075 mmHg (20°C) (based on constituents)
Vapor Density (Air = 1):	Not available.
Relative Density:	0.867 g/cm <sup>3</sup> (15.6°C)
Solubility in Water:	Insoluble
Partition Coefficient:	Not available.
Autoignition Temperature (°C/°F):	> 250°C / 482°F (based on constituents)
Decomposition Temperature (°C/°F):	Not available.
Viscosity:	45.9 mm <sup>2</sup> /s (40°C) 6.9 mm <sup>2</sup> /s (100°C)
Explosive Properties:	None.
Oxidizing Properties:	None.
Volatile Organic Content (VOC) (g/l):	850 - 867 g/l (as defined by 40CFR51.100)

## SECTION 10 STABILITY AND REACTIVITY

Reactivity:	Product will not undergo additional reaction.
Stability:	Stable under normal storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Contact with incompatible materials, excessive heat.
Incompatibilities:	Strong oxidizing agents.
Hazardous Decomposition Products:	Oxides of carbon, aliphatic compounds, toxic by-products.

## SECTION 11 TOXICOLOGICAL INFORMATION

*If available, toxicity data for the product is given; otherwise component data is listed.*

Acute Toxicity:	This product is not expected to be appreciably toxic. (Petroleum distillates, hydrotreated heavy paraffinic) Oral LD <sub>50</sub> (rat) > 5000 mg/kg (similar oil); Dermal LD <sub>50</sub> (rabbit) > 5000 mg/kg (similar oil); Inhalation LC <sub>50</sub> (rat) > 5.53 mg/l (4 hr) (aerosol) (no mortality – similar oil)
Skin Corrosion / Irritation:	The product may be slightly irritating to the skin. (Petroleum distillates, hydrotreated heavy paraffinic) Mildly irritating to skin (rabbit – similar oil).
Serious Eye Damage / Irritation:	The product may be slightly irritating to the eyes. (Petroleum distillates, hydrotreated heavy paraffinic) Non-irritating to eyes (rabbit – similar oil).

## SECTION 11 TOXICOLOGICAL INFORMATION

Respiratory or Skin Sensitization:	The product is not expected to be dermally sensitizing. (Petroleum distillates, hydrotreated heavy paraffinic) Not dermally sensitizing (guinea pig – similar oil).
Mutagenicity:	This product is not expected to be mutagenic. (Petroleum distillates, hydrotreated heavy paraffinic) Not mutagenic (in vitro mammalian chromosome aberration test and micronucleus assay - similar oil).
Carcinogenicity:	This product is not expected to be carcinogenic. (Petroleum distillates, hydrotreated heavy paraffinic) Carcinogenic potential is reduced for highly refined distillates. Tumors have developed in animal studies, but were dependent on the concentration of impurities. Not classified as to carcinogenicity to humans (IARC – Petroleum solvents).
Reproductive / Developmental Toxicity:	This product is not expected to be reproductively or developmentally harmful. (Petroleum distillates, hydrotreated heavy paraffinic) Reproductive performance and offspring development were not adversely affected in mice or rats (1000 mg/kg – similar oil).
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Single Exposure:	(Petroleum distillates, hydrotreated heavy paraffinic) No data.
Chronic/Subchronic Toxicity: Specific Target Organ/Systemic Toxicity – Repeated Exposure:	(Petroleum distillates, hydrotreated heavy paraffinic) In a 13-week oral study in rats at up to 500 mg/kg/day, the LOAEL was 125 mg/kg/day based on organ weight changes, reddening/discoloration of organs and atrophy in male sex organs (similar oil).
Aspiration Hazard:	This product does not pose an appreciable aspiration hazard.
Additional Information:	None.

## SECTION 12 ECOLOGICAL INFORMATION

*If available, ecological data for the product is given; otherwise component data is listed.*

Acute Ecotoxicity:	This product is not expected to be appreciably harmful to aquatic species. (Petroleum distillates, hydrotreated heavy paraffinic) LL50 (Fathead minnow) > 100 mg/l/96 hr (similar oil); EL50 (Daphnia magna) > 10000 mg/l/48 hr (similar oil); NOEL (algae) > 100 mg/l/72 hr (similar oil).
Mobility:	(Petroleum distillates, hydrotreated heavy paraffinic) Not expected to be mobile in soil.
Persistence/Degradability:	(Petroleum distillates, hydrotreated heavy paraffinic) Not inherently biodegradable (2-4% in 28 days – similar oil).
Bioaccumulation:	(Petroleum distillates, hydrotreated heavy paraffinic) May contain constituents with the potential to bioaccumulate.
Other adverse effects:	None.

## SECTION 13 DISPOSAL CONSIDERATION

Environmental precautions:	Prevent the material from entering drains or water courses. Do not discharge directly to a water source. Advise Authorities if spillage has entered watercourse or sewer or has contaminated soil or vegetation.
Product Disposal:	Dispose in accordance with all local, state (provincial), and federal regulations. Under RCRA, it is the responsibility of the product's user to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because the product uses, transformations,

## SECTION 13 DISPOSAL CONSIDERATION

mixtures, processes, etc. may render the resulting materials hazardous.

Container Disposal: Do not remove label until container is thoroughly cleaned. Empty containers may contain hazardous residues. This material and its container must be disposed of in a safe way.

## SECTION 14 TRANSPORT INFORMATION

### DOT (US):

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packaging Group:	None.
Reportable Quantity:	None.
Marine Pollutant:	None.

### IATA:

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packing Group:	None.

### IMDG:

Proper Shipping Name:	Not regulated
UN Number:	None.
Class:	None.
Packing Group:	None.
Marine Pollutant:	None.

*Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.*

## SECTION 15 REGULATORY INFORMATION

US Toxic Substance Control Act:	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian Domestic Substance List:	All components of this product are listed on the Canadian Domestic Substance List.
EU REACH:	One or more components of this product may not have been pre-listed or registered under REACH. Limited quantities may be permitted.
TSCA Sec.12(b) Export Notification:	This product does not contain a chemical at or above de minimis concentrations which requires reporting.
Canadian WHMIS Classification:	None.  This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.
Massachusetts Right-To-Know:	This product contains materials subject to disclosure under the

## SECTION 15 REGULATORY INFORMATION

	Massachusetts Right-To-Know Law: - Petroleum distillates, hydrotreated heavy paraffinic (as petroleum distillates)
New Jersey Right-To-Know:	This product contains materials subject to disclosure under the New Jersey Right-To-Know Law: - Petroleum distillates, hydrotreated heavy paraffinic (as petroleum distillates)
Pennsylvania Right-To-Know:	This product contains materials subject to disclosure under the Pennsylvania Right-To-Know Law: - Petroleum distillates, hydrotreated heavy paraffinic (as petroleum distillates)
California Proposition 65:	This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.
SARA TITLE III-Section 311/312 Categorization (40 CFR 370):	None.
SARA TITLE III-Section 313 (40 CFR 372):	This product does not contain materials which are listed in Section 313 at or above de minimis concentrations.
CERCLA Hazardous Substance (40 CFR 302)	This product does not contain materials subject to reporting under CERCLA and Section 304 of EPCRA.
Water Hazard Class (WGK):	This product is slightly water-endangering (WGK=1).
Other Chemical Inventories:	Australia (AICS): All components of this product are listed. China (IECSC): All components of this product are listed. Japan (ENCS): One or more components are not listed. Korea (KCI): One or more components are not listed. Philippines (PICCS): All components of this product are listed. Taiwan (TCSI): One or more components are not listed.

## SECTION 16 OTHER INFORMATION

NFPA Rating - HEALTH:	1		
NFPA Rating - FIRE:	1		
NFPA Rating - REACTIVITY:	0		
NFPA Rating - SPECIAL:	NONE		
Full text of H-Statements referred to under Section 3:			
H304	May be fatal if swallowed and enters airways		
H350	May cause cancer		
H361	Suspected of damaging fertility or the unborn child		
SDS Date Issued:	August 30, 2018		
SDS Current Version:	1.0	Version Date:	August 30, 2018
SDS Revision History:	v1.0 Initial version.		
Abbreviations:	GHS: Globally Harmonized System of Classification and Labeling of Chemicals		
	CAS#: Chemical Abstract Services Number		

## SECTION 16 OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists  
OSHA: Occupational Safety and Health Administration  
NFPA: National Fire Protection Association  
DOT: US Department of Transportation  
RCRA: US Resource Conservation and Recovery Act  
TLV: Threshold Limit Value  
TWA: Time-Weighted Average  
PEL: Permissible Exposure Limit  
STEL: Short Term Exposure Limit  
WEEL: Workplace Environmental Exposure Levels  
AIHA: American Industrial Hygiene Association  
NTP: National Toxicology Program  
IARC: International Agency for Research on Cancer  
LD50: Lethal Dose 50%  
LC50: Lethal Concentration 50%  
NOAEL: No Observed Adverse Effect Level  
NOEL: No Observed Effect Level  
EC50: Effective Concentration 50%  
LL50: Lethal Loading Rate 50%  
BCF: Bioconcentration Factor  
BOD: Biological Oxygen Demand  
Koc: Soil Organic Carbon Partition Coefficient.  
Tlm: Median Tolerance Limit

Key References:

United States National Library of Medicine's TOXNET  
Patty's Toxicology, 5<sup>th</sup> Edition  
European Commission's Institute for Health and Consumer Protection  
European Chemicals Agency (ECHA)  
American Conference of Governmental Industrial Hygienists  
International Agency for Research on Cancer  
United States National Toxicology Program  
United States Occupational Safety and Health Administration  
United States Department of Transportation  
Supplier Material Safety Data Sheets

Disclaimer:

*The data contained herein is based on information that the company believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of the company is authorized to vary any of such data. The company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.*

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