Safety Data Sheet

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev 3.

Revision date: Initial version

Date of issue: Aug 16, 2015

Product name:

AW Hydraulic Oil ISO 46

SECTION 1: Identification

Product identifier:	AW Hydraulic Oil ISO 46.	
Synonyms:	Standard Hydraulic Oil.	
Product Code Number:	9616, 9636, 9637, 9638.	
SDS number:	CGF001	
Recommended use:	Standard Hydraulic Oil.	
Recommended restrictions:	None known.	

Manufacturer/Importer/Supplier/Distributor information:

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Company Name:	SPX Hydraulic Technologies.
Company Address:	5885 11th Street
	Rockford, IL 61109
Company Telephone:	Office hours (Mon – Fri)
	8.00am – 5:00pm (CST)
	(815) 874-5556
Company Contact Name:	EH&S Department.
Emergency phone number:	INFOTRAC 24 Hour Emergency Numbers:
	USA, Canada, Puerto Rico (800) 535-5053.
	International (352) 323-3500.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

No physical hazards for this product.

Health hazards

Not expected to be a health hazard when used under normal conditions.

Environmental hazards

No environmental hazards for this product.

GHS Signal word:	No signal word required.
GHS Hazard statement(s):	Not expected to be a health hazard when used under normal conditions.
GHS Hazard symbol(s):	No Hazard Symbol required
GHS Precautionary statement(s):	Not applicable

Hazard(s) not otherwise Classified (HNOC):

Causes necrosis if injected into/under the skin. An aspiration hazard may be valid if the oil is vaporized under pressure.

Percentage of ingredient(s) of unknown acute toxicity: Not applicable

SECTION 3: Composition/information on ingredients

Mixture: Highly refined mineral oils and additives.

Chemical name	Concentration (weight %)	CAS#
Distillates (petroleum), solvent- dewaxed heavy paraffinic	0-95 %	64742-65-0
Distillates (petroleum), hydro treated - heavy paraffinic	0-60%	64742-54-7
Paraffin oils (petroleum), catalytic - dewaxed light	0-60%	64742-71-8
Additive	<1 %	Proprietary

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret due to the proprietary nature of one of the components.

SECTION 4: First-aid Measures

Description of necessary measures:

Inhalation: Move to fresh air. Treat symptomatically. See Section 8 for additional measures to reduce or eliminate exposure. If symptoms persist, seek medical attention.

Skin contact: Wash area of contact thoroughly with soap and water. If symptoms persist, seek medical attention.

Eye contact: If eyes become irritated, flush immediately with copious amounts of lukewarm water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists.

Ingestion: DO NOT induce vomiting. Consult a physician if necessary.

Most important symptoms/effects, acute and delayed: Not expected to be a health hazard when used under normal conditions. An aspiration hazard may be appropriate if the oil is vaporized under pressure.

Indication of immediate medical attention and special treatment needed: None known

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Water spray, Carbon dioxide, Dry chemical, Alcohol foam Unsuitable extinguishing media: Do not use water jet.

Specific hazards arising from the chemical: Hazardous combustion products may include carbon monoxide and other toxic gases/vapors.

Special protective equipment and precautions for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Fight fire from a protected location. Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed container cool.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear appropriate personal protective equipment (see Section 8). Do not breathe fumes or vapor.

Methods and materials for containment and cleaning up:

Eliminate sources of ignition. Stop source of leak if safe. Prevent entry into waterways and sewer systems. Absorb in vermiculite, dry sand or earth. Sweep up and place in a clearly labeled container for chemical waste.

SECTION 7: Handling and Storage

Precautions for safe handling: Avoid breathing mist or vapors. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling. Observe good personal hygiene practices. Change protective gloves/clothing when signs of contamination appear. Keep out of reach of children.

Conditions for safe storage, including any incompatibles: Store in original factory container in a dry area. Do not transfer to an unmarked container. Keep container tightly closed and in a well-ventilated place. Store away from heat and light.

SECTION 8: Exposure controls/personal protection

Control Parameters: Occupational exposure limits:

US OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200): Permissible Exposure Limits		
Substance PEL-TWA PEL-STEL		
	(8 hour)	(15 min)
Oil mist, mineral	5 mg/m^3	No data available
Distillates (petroleum), hydro	No data available	No data available
treated - heavy paraffinic		

Paraffin oils (petroleum), catalytic - dewaxed light	No data available	No data available
Additive	No data available	No data available

US ACGIH Threshold Limit Values		
Substance	TLV-TWA	TLV-STEL
	(8 hour)	(15 min)
Oil mist, mineral	5 mg/m^3	No data available
Distillates (petroleum), hydro treated - heavy paraffinic	No data available	No data available
Paraffin oils (petroleum), catalytic - dewaxed light	No data available	No data available
Additive	No data available	No data available

US NIOSH Guidelines		
Substance	REL	STEL
	(10 hour)	
Oil mist, mineral	5 mg/m^3	10 mg/m^3
Distillates (petroleum), hydro treated - heavy paraffinic	No data available	No data available
Paraffin oils (petroleum), catalytic - dewaxed light	No data available	No data available
Additive	No data available	No data available

Appropriate engineering controls: Maintain air concentrations below occupational exposure standards using engineering controls if necessary. Local exhaust ventilation is recommended. Eye wash station and showers required for emergency use.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Wear safety glasses or full face shield if splashes are likely to occur Approved to the appropriate OSHA standard. If possible, have eye-washing facilities readily available where eye irritation can occur.

Skin and Hand protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g.US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Respiratory protection: No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne

concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter pursuant to the requirements of OSHA Standards 29 CFR 1910.134 and 29 CFR 1926.103.

Other: Use as necessary to prevent exposure. Work clothing should be changed daily. Contaminated clothing should be removed and washed thoroughly before re-using.

Not available

Thermal hazards: No data available.

SECTION 9: Physical and chemical properties

Appearance			
Physical state:	Liquid		
Form:	Liquid		
Color:	Blue		
Odor:	Mild		
Odor threshold:	Not available		
pH:	Not available		
Melting point/freezing point:	Not available		
Initial boiling point and			
boiling range:	Not available		
Flash point:	>380 °F		
Evaporation rate:	Not available		
Flammability (solid, gas):	Not available		
Upper/lower flammability or explosive limits			
Flammability limit – lower %):	Not available		
Flammability limit – upper(%):	Not available		
Explosive limit – lower (%):	Not available		
Explosive limit – upper (%):	Not available		
Vapor pressure:	Not available		
Vapor density:	Not available		
Relative density:	0.87 -0.89		
Solubility(ies):	Insoluble		
Partition coefficient (n-octanol/water			
Auto-ignition temperature:	Not available		
Decomposition temperature:	Not available		
Viscosity:	46 cSt @40 degrees C		
Other information			
Bulk density:	Not available		
Flash point class:	Not available		

VOC (Weight %):

SECTION 10: Stability and Reactivity

Reactivity:	None known	
Chemical stability:	Stable	
Possibility of hazardous reactions:	None known	
Conditions to avoid:	Heat, sparks, flames.	
Incompatible materials:	Strong oxidizing agents.	
Hazardous decomposition Products:	Carbon monoxide, Carbon dioxide	

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation:	Not expected to be a primary route of exposure.
Ingestion:	Not expected to be a primary route of exposure.
Skin:	Not expected to be a primary route of exposure.
Eye:	Not expected to be a primary route of exposure

Symptoms related to the physical, chemical, and toxicological characteristics:

Not expected to be a health hazard when used under normal conditions. An aspiration hazard is only valid if the oil is vaporized under pressure.

Delayed and immediate effects and chronic effects from short or long-term exposure: Detailed below.

Numerical measures of toxicity: Ingredient Information:

Substance	Test Type (species)	Value
Distillates	LD ₅₀ Oral (Rat)	>5000 mg/kg
(petroleum),	LD ₅₀ Dermal (Rabbit)	>5000 mg/kg
solvent- dewaxed heavy paraffinic	LC ₅₀ Inhalation (Rat)	>5 mg/l (4h)
Distillates	LD ₅₀ Oral (Rat)	>5000 mg/kg
(petroleum), hydro	LD ₅₀ Dermal (Rabbit)	>5000 mg/kg
treated - heavy paraffinic	LC ₅₀ Inhalation (Rat)	> 4 mg/l (4h)
Paraffin oils	LD ₅₀ Oral (Rat)	>5000 mg/kg
(petroleum),	LD ₅₀ Dermal (Rabbit)	>2000 mg/kg
catalytic - dewaxed light	LC ₅₀ Inhalation (Rat)	2.18 mg/L air (4h)
	LD ₅₀ Oral (Rat)	No data available
Additive	LD ₅₀ Dermal (Rabbit)	No data available
	LC ₅₀ Inhalation (Rat)	No data available

Product Acute Toxicity Estimates:

Acute Oral Toxicity (rat) Product: >50

>5000 mg/kg (estimate based on components)

Acute Dermal Toxicity (rabbit) Product: No data available Acute Inhalation Toxicity		
•	o data available.	
Skin corrosion/irritation:	Based upon information available on the known components, the product is not expected to cause skin irritation.	
Serious eye damage/eye irritation:	Based upon information available on the known components, the product is not expected to cause eye damage or eye irritation.	
Respiratory sensitization:	Based upon information available on the known components, the product is not expected to cause respiratory sensitization.	
Skin sensitization:	Based upon information available on the known components, the product is not expected to cause skin sensitization.	
Germ cell mutagenicity:	Based upon information available on the known components, the product is not anticipated to be a mutagen.	
Carcinogenicity:	No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.	
Reproductive toxicity:	Based upon information available on the known components, the product is not anticipated to cause reproductive toxicity.	
Specific target organ toxicity- Single exposure:	Based upon information available on the known components, the product is not anticipated to cause specific target organ toxicity after single exposure.	
Specific target organ toxicity- Repeat exposure:	Based upon information available on the known components, the product is not anticipated to cause specific target organ toxicity after repeated or prolonged exposure.	

Aspiration hazard: Based upon information available on the known components, this product is not expected to be a health hazard when used under normal conditions. An aspiration hazard may occur if the oil is vaporized under pressure.

Further information:

No data available

SECTION 12: Ecological information

Ecotoxicity:

Product data: No data available

Ingredient Information:

Substance	Test Type	Species	Value
	LL/EL/IL50	Fish	Practically non toxic:
	NOEC/NOEL		LL/EL/IL50 > 100 mg/l
			NOEC/NOEL > 100 mg/l
			(based on test data)
Distillates (petroleum), solvent- dewaxed heavy paraffinic	LL/EL/IL50	Invertebrate	Practically non toxic:
	NOEC/NOEL		LL/EL/IL50 > 100 mg/l
			NOEC/NOEL expected to be >
			$1.0 - \langle = 10 \text{ mg/l} \rangle$ (based on test
			data)
	LL/EL/IL50	Algae	Practically non toxic:
			LL/EL/IL50 > 100 mg/l
	NOEC	Fish	NOEC> 1000 mg/l (7d)
		Pimephales	
Distillates (petroleum),		promelas	
hydro treated - heavy	NOEC	Invertebrate	NOEC> 1000 mg/l (21d)
paraffinic		Daphnia	
		magna	
	EC ₅₀	Algae	EC50> 1000 mg/l (96h)
	NOELR	Fish	NOELR >= $1000 \text{ mg/L} (14d)$
Paraffin oils	LL50		LL50 > 100 mg/L (96h)
(petroleum), catalytic - dewaxed light	NOEL	Invertebrate	NOEL 10mg/L (21d)
	LL50		LL50 > 10000 mg/L (24h)
	NOEL	Algae	NOEL >= $100 \text{ mg/L} (72h)$
Additive	LC ₅₀	Fish	No data available
	EC ₅₀	Invertebrate	No data available
	LC ₅₀	Algae	No data available

Persistence and degradability:

Major constituents are expected to be readily biodegradable, but the product contains components that may persist in the environment.

Bioaccumulative potential:	Contains components with the potential to
Mobility in soil:	bioaccumulate. If it enters soil, it will adsorb to soil particles and will not be mobile.
Mobility in general:	Liquid under most environmental conditions. Floats
Other adverse effects:	on water. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations

Disposal instructions:

Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with all applicable Federal, State and local regulations. Do not dispose into the environment, in drains or in water courses.

SECTION 14: Transport Information

Land Transport DOT:	Not regulated.
Air Transport IATA:	Not regulated.
Sea Transport IMDG:	Not regulated.

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:

Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4: This product contains chemicals listed on CERCLA. Zinc Compounds (<1 %)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None

SARA Title III

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None

Section 311/312 (40 CFR 370): Immediate Hazard: No Delayed Hazard: No Fire Hazard: No Pressure Hazard: No Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372): None

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986: None known.

Massachusetts Right to Know: Oil Mist, mineral; Petroleum paraffin oils, catalytic dewaxed light are listed on the Massachusetts Right to Know list.

Minnesota Hazardous Substance List: None of the components are listed on the Minnesota HSL.

New Jersey Right to Know: None of the components are listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: None of the components are listed on the Pennsylvania Right to Know list.

SECTION 16: Other Information

Revision Date: Aug 16, 2015

To the best of our knowledge, the information contained herein is accurate. However SPX Hydraulic Technologies does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.