

MATERIAL SAFETY DATA SHEET

HYDRAULIC OIL AW46

I. PRODUCT AND MANUFACTURER INFORMATION	
Product name	HYDRAULIC OIL AW46
Chemical name	PETROLEUM OIL
Synonyms	LUBRICATING OIL
CAS number	NE
Manufacturer	Ashburn Chemical Technologies 7403 Wright Rd Houston, TX 77041
Emergency phone number	USA: 800-424-9300 (CHEMTREC) Outside USA: 703-527-3887 (CHEMTREC)
General Information	832-399-1000
Date of last revision	3/6/11

II. HAZARDOUS INGREDIENTS					
HAZARDOUS COMPONENT	CAS NUMBER	% Optional	OSHA PEL	ACGIH TLV	CHEMICAL AND/OR COMMON NAME(S)
Severely hydrotreated heavy naphthenic distillate	64742-52-5			5 mg/m ³	
Zinc C1-C14 alkydithiophosphate	68649-42-3				

III. PHYSICAL AND CHEMICAL CHARACTERISTICS	
Boiling point @ 760 mm Hg	400 C
Vapor pressure at 20 °C	ND
Vapor density (air = 1)	ND
Solubility in water	INSOLUBLE
Appearance and odor	PALE YELLOW TO AMBER LIQUID
Specific gravity (H ₂ O = 1.0)	0.89
Melting point	ND
Evaporation rate (butyl acetate = 1)	<1

IV. FIRE AND EXPLOSION HAZARD DATA	
Combustible/Not combustible	OSHA/NFPA Class IIIB combustible liquid, slightly combustible.
Flammable/Not flammable	Not Flammable
Pyrophoric/Not pyrophoric	Not pyrophoric
Explosive/Not explosive	Not explosive
Flash point (test method)	414 F (Pensky-Martens (ASTM D-83))
Flammable limits (in Air % by volume)	LEL AP 1% UEL AP 7%
Extinguishing media	Water spray, foam or carbon dioxide, dry chemical.
Special fire-fighting procedures or equipment	Treat as hot oil. Fire Fighters should wear NIOSH approved self-contained breathing apparatus.
Unusual fire and explosion hazards	Intense heat can cause drums to rupture. Cool fire-exposed containers with water.

V. REACTIVITY DATA	
Material is stable/unstable	Stable
Conditions to avoid	Keep away from extreme heat and open flame.
Incompatibility (materials to avoid)	Strong oxidizers
Hazardous decomposition or by-products	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and trace oxides of sulfur, phosphorous, zinc

	and or nitrogen.
Hazardous polymerization will/will not occur	Will not occur.

VI. HEALTH HAZARD DATA	
Threshold limit value	
Primary route(s) of entry	Skin
Known Hazards Under 29 CFR 1910.1200	
Mutagenic (genetic defects)	None
Reproductive	None
Systemic	None
Teratogenic (birth defects)	None
Carcinogen listed in:	
NTP (National Toxicology Program)	NO
IARC Monographs	NO
OSHA	NO
Signs and symptoms of exposure	
Inhalation	In elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, throat, bronchi, and lungs.
Skin contact	This product may cause mild skin irritation from prolonged skin contact. Injection into the skin, muscle or blood stream requires immediate medical attention.
Eye contact	This product can cause transient eye irritation with short term contact with liquid sprays or mists.
Ingestion	If ingested, no significant adverse health effects are anticipated. Ingestion can cause mild irritation to the digestive tract or cause a laxative effect. If aspirated into the lungs, the material can cause severe lung damage or death.
Emergency first aid procedures	
Inhalation	Move victim to fresh air. If victim is not breathing, begin artificial respiration. If breathing is difficult, 100% humidified oxygen should be administered by a qualified individual. Seek immediate medical attention.
Skin contact	Remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with soap and water. Seek medical attention if tissue appears damaged or if irritation persists. Thoroughly clean clothing before re-use. Discard contaminated leather goods. Injection into the skin, muscle or blood stream requires immediate medical attention.
Eye contact	Check for and remove contact lenses. Flush eyes with cool clean low pressure water while occasionally lifting and lowering the eyelids. Seek medical attention if excessive tearing, redness, or pain persists.
Ingestion	Do not induce vomiting unless directed by a physician. Do not give anything to drink unless directed by a physician. Never give anything by mouth to person that is unconscious. Seek medical attention immediately.
Medical conditions generally aggravated by exposure	Personnel with pre-existing skin disorders should avoid repeated or prolonged contact with this product.
Notes to physician	In the event of injection into underlying tissue, immediate treatment should include extensive incision and saline irrigation. Inadequate treatment can result in eschemia and gangrene. Early symptoms may be minimal.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE	
Steps to take if released or spilled	Treat as an oil spill. Dike area. Clean up with absorbent material. Do not flush into drain or sewers. Place in a DOT approved container for disposal.
Waste disposal method	According to federal, state and local regulations.

Precautions for handling and storing		
Other precautions		
Hazard ratings	HMIS	NFPA
Health	1	1
Flammability	1	1
Reactivity	0	0
Personal protection	B	

VIII. CONTROL MEASURES	
Protective gloves (type and material)	Use gloves that are chemical resistant such as neoprene or nitrile rubber.
Eye protection	Use safety glasses with side shields or goggles or face shield if splashing or spraying is anticipated.
Other protective clothing or equipment	Impervious protective clothing. e.g. Tyvek.
Respiratory protection (specify type)	None normally required. If TLV is exceeded, use NIOSH approved respirator.
Ventilation and conditions	General room ventilation should be satisfactory. Local exhaust ventilation may be necessary if misting is generated.
Local	
Mechanical	
Other	
Special	
Work/hygienic practices	Laundry contaminated clothing before reuse. Avoid prolonged breathing of mist and vapors. Use as directed. Normal precautions common to good manufacturing should be followed in handling and storing. Store away from food. Wash hands before eating, drinking, or smoking.

IX. ADDITIONAL REGULATORY INFORMATION	
SARA hazard category (Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III))	Delayed (Chronic) Health Hazard
Toxic chemical(s) subject to the supplier notification requirements of section 313 of the Superfund Amendment and Reauthorization Act of 1986 (SARA) and the requirements of 40 CFR part 372	NONE
Ingredient(s) regulated under the Clean Air Act Section 112 hazardous air pollutants and subject to all reporting requirements of CERCLA (Superfund)	NONE

NA – not applicable NR – not reported ND – not determined NE – not established UN – unknown

The information presented in this MSDS has been compiled from sources deemed reliable. This MSDS is presented in good faith and believed to be accurate as of the effective date shown above. No warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another. It is the responsibility of the buyer to insure compliance with federal, state, provincial and local laws and regulations.