

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Synthetic Hydraulic AW-46

**Product Code:** 731

**Chemical Name:** Motor Oil, Petroleum Oil; Lube Oil, Petroleum Hydrocarbon, Lubricant

**Chemical Family:** Hydraulic Fluid

**Recommended Use:** For Transportation and Industrial Applications

**Manufacturer:** Scot Lubricants LLC

6 Horwith Drive  
Northampton, PA 18067

**Emergency Telephone Numbers:** 484-619-1393

Information: 484-275-7990 8am-5pm EST M-F

### 2. HAZARD IDENTIFICATION

This material is not considered hazardous by OSHA Hazard Communication Standard 29 CFR 1910.1200

Classification of the substance or mixture

Not Classified.

GHS label elements

Hazard Pictograms: Non Required

Signal word No Signal Word Not Hazardous

Hazard Statements No know significant effects or critical hazards

Precautionary statements

P273 Avoid release into the environment.

P391 Collect Spillage

P501 Dispose of contents/container in accordance with local, regional, national and international regulations.

Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Wt. Percent	Component	Synonym	CAS#
0 - 100	Highly refined petroleum lubricating oil	Lubricating oil base stock	Various*
0.1 -0.5	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts		68649-42-3

**Component Related Regulatory Information**

\*Highly refined petroleum lubricating oil contains one or more CAS numbers listed as follows:

64741-88-4, 64742-52-5, 64742-54-7, 64742-55-8, 64742-65-0, 64742-57-0, 64742-01-4, 64742-62-7, 72623-83-7

### 4. FIRST AID MEASURES

**INHALATION:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

**EYE CONTACT:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, flush with water for at least 15 minutes. If irritation persists, obtain medical assistance.

**SKIN CONTACT:** Remove affected clothing and shoes. Wash with soap and water until no odor remains. Get medical attention if irritation or pain develops or persists. If product is injected under pressure into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, a physician should immediately evaluate the individual as a medical emergency. Wash clothing before reuse.

**INGESTION:** Do NOT induce vomiting. Immediately get medical attention. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

**NOTE TO PHYSICIANS:** Treat symptomatically and supportively. Treatment may vary with condition of victim and

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## 5. FIRE FIGHTING MEASURES

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**FLASHPOINT (METHOD):** 329°F (165°C) Minimum COC

**FLAMMABLE LIMITS:** N/A

**AUTO-IGNITION TEMP:** 675°F Estimated; 359°C Estimated

**CONDITIONS OF FLAMMABILITY:** Sparks or flame. Product may burn, but does not ignite readily.

**EXTINGUISHING MEDIA:** Water spray, dry chemical, carbon dioxide (CO<sub>2</sub>), regular foam.

**HAZARDOUS COMBUSTION PRODUCTS:** Decomposition and combustion material may be toxic. Burning may product sulfur oxides, aldehydes, ketones, carbon monoxide and unidentified organic compounds.

**HAZARD RATING**

0= LEAST  
1=SLIGHT  
2=MODERATE  
3=HIGH  
4=EXTREME

**NFPA 704 HAZARD IDENTIFICTION**

HEALTH HAZARD (BLUE)	1
FIRE HAZARD (RED)	1
REACTIVITY (YELLOW)	0
SPECIFIC HAZARD (WHITE)	

**FIRE FIGHTING INSTRUCTIONS:** Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full- body protective equipment are required for fire emergencies.

**FIRE AND EXPLOSION HAZARDS:** Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Products are not sensitive to mechanical impact or static discharge.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures.** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

**Non-Emergency Personnel:** Use appropriate personal protection equipment (PPE)

**Emergency Personnel:** Protective Equipment – Equip cleanup crew with proper protection

**Emergency Procedures:** Evacuate unnecessary personnel.

Stop Leak if safe to do so. Eliminate ignition sources. Ventilate area.

**Environmental Procedures:** Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**Containment and Clean Up:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Clean spills up immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

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## 7. HANDLING AND STORAGE

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**Precautions for Safe Handling:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping as spillage can be slippery on smooth surfaces wither wet or dry. Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**Precautions for Safe Storage:** Comply with applicable regulations. Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****EXPOSURE GUIDELINES:****COMPONENT EXPOSURE LIMITS****Highly Refined Petroleum Lubricating Oil**

ACGIH: 5mg/m<sup>3</sup> TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
10 mg/m<sup>3</sup> STEL (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
OSHA Final: 5 mg/m<sup>3</sup> TWA (related to Oil mist, mineral)  
OSHA Vacated: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)  
NIOSH: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)  
10mg/m<sup>3</sup> STEL (related to Oil mist, mineral)

**Mineral Oil**

ACGIH: 5mg/m<sup>3</sup> TWA (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
10 mg/m<sup>3</sup> STEL (sampled by method that does not collect vapor) (related to Oil mist, mineral)  
OSHA Final: 5mg/m<sup>3</sup> TWA (related to Oil Mist, mineral)

**ENGINEERING CONTROLS:**

**VENTILATION:** Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below applicable exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT —**

**EYE:** Splash proof chemical goggles recommended to protect against splash of product.

**RESPIRATORY:** No respiratory protection is normally required. Use NIOSH-certified P- or R- series particulate filter and organic vapor cartridges when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air purifying respirators is limited. Do not use N-rated respirators. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4. Consult a qualified Industrial Hygienist or Safety Professional for respirator selection guidance.

**SKIN:** Where skin contact is likely, wear neoprene, nitrile or equivalent protective gloves; use of natural rubber or equivalent gloves is not recommended. When product is heated and skin contact is likely, wear heat-insulating gloves, boots and other protective clothing.

**PERSONAL HYGIENE:** Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard leather articles, such as shoes, saturated with these products.

**OTHER:** Where spills and splashes are likely, facilities storing or using these products should be equipped with emergency eyewash and shower, both equipped with clean water, in the immediate work area.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE/ODOR:** AMBER FLUID/PETROLEUM ODOR.

**VAPOR PRESSURE:** LESS THAN 0.1(mm Hg @ 68°F 20°C)

**MOLECULAR WEIGHT:** N/D

**INITIAL BOILD POINT:** 501°F (260.56°C) (MINIMUM)

**SOLUBILITY IN WATER:** INSOLUABLE

**EVAPORATION RATE:** 1000X SLOWER (ETHYL ETHER+1)

**SPECIFIC GRAVITY:** 0.86 (WATER=1)

**RELATIVE DENSITY:** 0.86 g/cm<sup>3</sup> AT 60°F (15.5°C)

**FLASHPOINT:** 329°F (165°C) (MINIMUM) CLEVELAND OPEN CUP

**FLAMMABLE LIMITS IN AIR:** LOWER: N/D UPPER: N/D

**AUTO-IGNITION TEMPERATURES:** 675°F ESTIMATEED; 359° ESTIMATED

**MELTING POINT:** N/D

**BOILING RANGE:** N/D

**FREEZING/MELTING POINT:** N/A

**pH:** N/D

**ODOR THRESHOLD:** N/D

**VAPOR DENSITY:** 10+ (AIR =1)

**FLAMABILITY:** ND

**10. STABILITY AND REACTIVITY**

**Synthetic Hydraulic AW-46 CODE: 731****STABILITY:** Stable under normal temperatures and pressures. Avoid sparks, or flame.**INCOMPATIBLE MATERIALS:** Avoid oxidizing agents.**REACTIVITY:** Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.**HAZARDOUS DECOMPOSITION:** None under normal temperatures and pressures. Also see **Section 5:****HAZARDOUS COMBUSTION PRODUCTS.****11. TOXICOLOGICAL INFORMATION****Information On Toxicological Effects - Product****Acute Toxicity:** Not Classified**LD50 and LC50 Data:** Not Available**Skin Corrosion/Irritation:** Not Classified**Eye Damage/Irritation:** Not Classified**Respiratory or Skin Sensitization:** Not Classified**Germ Cell Mutagenicity:** Not Classified**Teratogenicity:** Not Classified**Carcinogenicity:** Not Classified**Specific Target Organ Toxicity (Single Exposure):** Not classified**Aspiration Hazard:** Not classified**Symptoms/Injuries After Inhalation:** Over exposure may be irritating to the respiratory system.**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse gastrointestinal effects.**Chronic Symptoms:** Not Classified**Information On Toxicological Effects – Ingredient(s)****Paraffin oils (8012-95-1)**

LC50 Inhalation Rat 2062 ppm/4h

ATE US (gases) 2,062.00 ppmV/4h

**Heavy paraffinic, Distillates, petroleum, hydro-treated heavy paraffinic (64742-54-7)**

LD50 Oral Rat &gt;2000 mg/kg

LD50 Dermal Rabbit &gt;2 g/kg

**Petroleum distillates, solvent dewaxed (64742-65-0)**

LD50 Oral Rat &gt;5000 mg/kg

LD50 Dermal Rabbit &gt;5 g/kg

**12. ECOLOGICAL INFORMATION****Toxicity Ecology – General:** Toxic to aquatic life**Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)**

LC50 Fish 1 1.0-5.0 mg/l (Exposure time: 96h – Species: Pimephales promelas (static))

EC50 Daphnia 1 1-1.5 mg/l (Exposure time: 48h – Species: Daphnia magna)

LC 50 Fish 2 10.0-35.0 mg/l (Exposure time: 96h – Species: Pimephales promelas (semi-static))

**Petroleum distillates, solvent dewaxed (64742-65-0)**

EC50 Daphnia &gt;1000 mg/L (Exposure time: 48h – Species: Daphnia magna)

LC50 Fish 1 &gt;5000 mg/L (Exposure time: 96h – Species: Oncorhynchus mykiss)

**Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)**

LC50 Fish 1 &gt;5000 mg/l (Exposure time: 96h – Species: Oncorhynchus mykiss)

EC50 Daphnia 1 &gt;1000 mg/l (Exposure time: 48h – Species: Daphnia magna)

**Persistence & Degradability** Not Available**Bioaccumulation Potential** Not Available

**SCOT LUBRICANTS LLC****SAFETY DATA SHEET****Synthetic Hydraulic AW-46 CODE: 731****Soil Mobility** Not Available**Other Adverse Effects** Not Available**13. DISPOSAL INFORMATION**

**DISPOSAL:** 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.

**USEPA WASTE CODES:** This product, if discarded, is not expected to be a characteristic or listed hazardous waste. If recycled in the USA, it must be managed in accordance with 40 CFR Part 279. Processing, use or contamination by user may change the waste code(s) applicable to the disposal of these products.

**14. TRANSPORTATION INFORMATION****DOT****PROPER SHIPPING NAME** Not regulated as a hazardous material for Land Transport**HAZARD CLASS:** Not regulated**ID NUMBER:** Not regulated**LABEL REQUIRED:** Not regulated**EMERGENCY RESPONSE GUIDE NUMBER:** Not applicable. Reference North American Emergency Response Guidebook.**IATA:** Not regulated**15. REGULATORY INFORMATION****U.S. Federal Regulations**

SARA 311/312 Hazard Class Delayed (chronic) health hazard

**US State Regulations****Paraffin oils (8012-95-1)**

Massachusetts – Right to Know List

New Jersey – Right to Know Hazardous Substance List

Pennsylvania – Right to Know List

**Canadian Regulations**

WHMIS Classification Not Classified

**Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-3)**

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class D Division 2 Subdivision B-Toxic material causing other toxic effects.

**Paraffin oils (8012-95-1)**

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List) – Concentration 1%

WHMIS Classification Class D Division 2 Subdivision A-Very toxic material causing other toxic effects.

**Petroleum distillates, solvent dewaxed (64742-65-0)**

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHIS classification criteria

**Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)**

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Uncontrolled product according to WHIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR

**SCOT LUBRICANTS LLC**  
**Synthetic Hydraulic AW-46**

**SAFETY DATA SHEET**  
**CODE: 731**

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**16. OTHER INFORMATION**

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**DATE ISSUED:** June 7, 2016  
**SUPERSEDES:**  
**REVISION NO.**  
**REVISION INFORMATION:**  
**SDS #:** CODE 731

**SCOT LUBRICANTS LLC**  
**6 HORWITH DRIVE**  
**NORTHAMPTON, PA 18067**  
**484-275-7990**

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