

**AMERICA'S  
CHOICE**

MAXIMUM PERFORMANCE

# Anti-Wear Hydraulic Oil

**America's Choice\*** Anti-Wear Hydraulic Oils contain a zinc/phosphorous additive to minimize wear in high speed, high-pressure vane, gear, and piston pumps. Meets Cincinnati Machine P-68, P-69, P-70, Denison HF-0, HF-1, HF-2, Vickers 35VQ25, Eaton/Vickers M-2950-S, I-286-S, Ford M6C32, Chrysler, General Motors LS-2, and US Steel 136 specifications for stability and durability.

Safety-Kleen's closed loop re-refining process takes used oil and re-refines it into exceptional quality base oil that is combined with premium additives to create a high performing re-refined oil. Re-refining oil is an infinitely better way to protect our environment and economy by reducing heavy metal emissions, greenhouse gases, and our dependence on foreign oil.

Typical Properties							
<b>America's Choice*</b> ISO Grade	22	32	46	68	100	150	
AGMA Grade	-	-	1	2	3	4	
Color	L 1.0	L 1.0	L 1.5	L 2.5	L 3.0	L 4.5	
Specific Gravity @ 60°F	0.856	0.858	0.861	0.868	0.874	0.879	
Kinematic Viscosity							
cSt @ 40°C	22.1	32.1	43.7	66.6	99.6	145.3	
cSt @ 100°C	4.4	5.6	6.8	9.0	11.7	14.8	
Viscosity Index	110	114	113	111	106	102	
Flash Point, °C	202	230	248	244	246	258	
Pour Point, °C	-42	-36	-33	-33	-30	-15	
Demulsibility D1401	Pass	Pass	Pass	Pass	Pass	Pass	
Oxidation Stability D943, hrs	4000	4000	4000	2400	1500	1500	
Rust Characteristics D665, A & B	Pass	Pass	Pass	Pass	Pass	Pass	
Copper Corrosion	1A	1A	1A	1A	1A	1A	

*Note: Values shown above are representative of current production and may vary within modest ranges.*

Rev. BY70

Safety-Kleen Systems, Inc.  
safety-kleen.com

Customer Service 1-800-525-5739

**AMERICA'S CHOICE AW HYDRAULIC OIL ISO 46 (OEM)  
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA**



**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** AMERICA'S CHOICE AW HYDRAULIC OIL ISO 46 (OEM)  
**SYNONYMS:** Petroleum oil; Lube oil; Petroleum hydrocarbon; Lubricant.  
**PRODUCT CODE:** Prefix 31  
**PRODUCT USE:** For lubricating hydraulic systems.  
If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

This number is for emergency use only. If you desire non-emergency product information, please call a phone number listed below.

**24-HOUR EMERGENCY PHONE NUMBERS  
MEDICAL AND TRANSPORTATION (SPILL):**

**1-800-468-1760**

**SUPPLIER:** Safety-Kleen Systems, Inc.  
5360 Legacy Drive  
Building 2, Suite 100  
Plano, Texas 75024  
USA  
**1-800-669-5740**  
[www.Safety-Kleen.com](http://www.Safety-Kleen.com)

**TECHNICAL INFORMATION:** 1-800-669-5740 Press 1, then 1, then Extension 7500

**MSDS FORM NUMBER:** 82775

**ISSUE:** December 10, 2009

**ORIGINAL ISSUE:** February 4, 1999

**SUPERSEDES:** December 19, 2006

**PREPARED BY:** Product MSDS Coordinator

**APPROVED BY:** MSDS Task Force

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**SECTION 2: HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW**

**APPEARANCE**

Amber liquid, petroleum odor.

**CAUTION!**

**HEALTH HAZARDS**

May be harmful if swallowed.  
May irritate eyes and skin.

**POTENTIAL HEALTH EFFECTS**

**INHALATION (BREATHING):** This product is not likely to present an inhalation hazard at normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, high concentrations of generated vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

**EYES:** May cause irritation.

**SKIN:** May cause irritation. A single prolonged exposure is not likely to be absorbed through the skin in harmful amounts.

**INGESTION (SWALLOWING):** May cause throat irritation, nausea, vomiting, and diarrhea. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

**CHRONIC:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

**CANCER INFORMATION:** No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

**POTENTIAL ENVIRONMENTAL EFFECTS**

Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CAS #	Component	Synonyms	Percent
64742-58-1	Lubricating oils, petroleum, hydrotreated spent	Hydrotreated paraffinic base oil	99

**Component Related Regulatory Information**

This product may be regulated, have exposure limits or other information identified as the following: Oil mist, mineral (8012-95-1).

The remainder of the ingredients are additives. Each individual additive ingredient is present in concentrations of less than 1 WT% (or 0.1 WT% for carcinogens). Each individual additive is not present in concentrations that would exceed an established OSHA Permissible Exposure Limit or ACGIH Threshold Limit Value® or present at concentrations that present a health risk. The total of all additives in this product is 1 WT%.

**SECTION 4: FIRST AID MEASURES**

**INHALATION (BREATHING):** Remove 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.

**EYES:** If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

**SKIN:** Remove affected clothing and shoes. Wash skin thoroughly with soap and water. 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.

**INGESTION (SWALLOWING):** Do NOT induce vomiting. Immediately get medical attention. Call 1-800-468-1760 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

**NOTE TO PHYSICIANS:** Treat symptomatically and supportively. Treatment may vary with condition of victim and specifics of incident. Call 1-800-468-1760 for additional information.

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**SECTION 5: FIRE FIGHTING MEASURES**

**HAZARDOUS COMBUSTION PRODUCTS:**

Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

**CONDITIONS OF FLAMMABILITY:**

Sparks or flame. Product may burn, but does not ignite readily.

**PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:**

A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

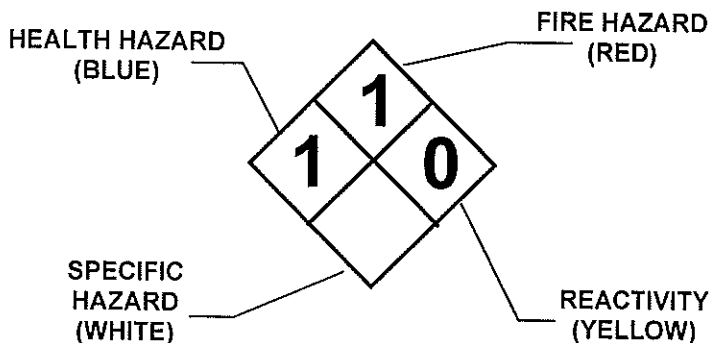
**EXTINGUISHING MEDIA:**

Carbon dioxide, regular foam, dry chemical, water spray, or water fog. Water or foam may cause frothing.

**NFPA 704**

**HAZARD IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



**FIRE FIGHTING INSTRUCTIONS:**

Keep storage containers cool with water spray.

**FIRE AND EXPLOSION HAZARDS:**

Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Product is not sensitive to mechanical impact or static discharge.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or sorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

**SECTION 7: HANDLING AND STORAGE**

**HANDLING:** Keep away from sparks or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean tools and explosion-proof equipment. When transferring large volumes of product, metal containers, including trucks and tank cars, should be grounded and bonded. This product has a low vapor pressure and is not expected to present an inhalation hazard under normal temperatures and pressures. However, when aerosolizing, misting, or heating this product, do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

**SHIPPING AND STORING:** Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**EXPOSURE GUIDELINES:**

**Component Exposure Limits**

**Lubricating oils, petroleum, hydrotreated spent (64742-58-1)**

ACGIH:	5 mg/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 (related to Oil mist, mineral)
OSHA:	5 mg/m <sup>3</sup> TWA (related to Oil mist, mineral)
NIOSH:	5 mg/m <sup>3</sup> TWA (related to Oil mist (mineral))
	10 mg/m <sup>3</sup> STEL (related to Oil mist (mineral))

**ENGINEERING CONTROLS:** 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**

**RESPIRATORY PROTECTION:** 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.

**EYE PROTECTION:** Where eye contact is likely, wear safety glasses; contact lens use is not recommended.

**SKIN PROTECTION:** Where skin contact is likely, wear chemical impervious protective gloves; use of natural rubber or equivalent gloves is not recommended.

When product is heated and skin contact is likely, wear heat-resistant gloves, boots, and other protective clothing.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, coveralls, long sleeve shirts, or other protective clothing.

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**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 this product.

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

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**PHYSICAL STATE, APPEARANCE, AND ODOR:** Amber liquid, petroleum odor.

**ODOR THRESHOLD:** Not available

**MOLECULAR WEIGHT:** Not applicable

**SPECIFIC GRAVITY:** 0.88 (water = 1) (approximately)

**DENSITY:** 7.3 LB/US gal (870 g/L) (approximately)

**VAPOR DENSITY:** Not available

**VAPOR PRESSURE:** less than 0.1 mm Hg at 68°F (20°C)

**BOILING POINT:** 475°F (246°C) (minimum)

**FREEZING/MELTING POINT:** Not available [pour point -22°F (-30°C) (maximum)]

**pH:** Not applicable

**EVAPORATION RATE:** Not available

**SOLUBILITY IN WATER:** Insoluble

**FLASH POINT:** 392°F (200°C) (minimum) Cleveland Open Cup

**FLAMMABLE LIMITS IN AIR:** **LOWER:** Not available. **UPPER:** Not available.

**AUTOIGNITION TEMPERATURE:** Not available.

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**SECTION 10: STABILITY AND REACTIVITY**

- STABILITY:** Stable under normal temperatures and pressures.
- CONDITIONS TO AVOID:** Spark, flame and incompatible materials.
- INCOMPATIBILITY:** Avoid oxidizing agents.
- REACTIVITY:** Polymerization is not known to occur under normal temperature and pressures. Not reactive with water.
- HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

**SECTION 11: TOXICOLOGICAL INFORMATION**

**TOXICITY DATA:**  
Component Analysis - LD50/LC50

**Lubricating oils, petroleum, hydrotreated spent (64742-58-1)**

Oral LD50 Rat: >2000 mg/kg  
Dermal LD50 Rat: >2000 mg/kg  
Dermal LD50 Rabbit: >4480 mg/kg

**ACUTE EFFECTS:** May irritate eyes and skin. May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and diarrhea. Aspiration hazard: breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

**REPEATED DOSE EFFECTS:** Based on best current information, there is no known human sensitization associated with this product.

Based on best current information, there is no known reproductive toxicity associated with this product.

Based on best current information, there is no known teratogenicity associated with this product.

Based on best current information, there is no known mutagenicity associated with this product.

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**CARCINOGENICITY:** Neither ACGIH, IARC, nor NTP have classified this material as to its carcinogenic potential.

Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 or A2 substances; as categorized by IARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

**TARGET ORGAN EFFECTS:** Prolonged or repeated inhalation of oil mist may cause oil pneumonia, lung tissue inflammation, and/or fibrous tissue formation.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY:** Component Analysis - Ecotoxicity - Aquatic Toxicity

Lubricating oils, petroleum, hydrotreated spent (64742-58-1)		
Test & Species		Conditions
96 Hr LC50 Brachydanio rerio	79.6 mg/L	semi-static
96 Hr LC50 Pimephales promelas	3.2 mg/L	semi-static

**PERSISTANCE/DEGRADABILITY:** May cause long-term adverse effects in the aquatic environment.

**BIOACCUMULATION/ACCUMULATION:** This product is not expected to bioaccumulate.

**MOBILITY IN ENVIRONMENTAL MEDIA:** Product is expected to float on water and have low mobility through soil.

**OTHER ADVERSE EFFECTS:** No additional information available.

**OCTANOL/WATER PARTITION COEFFICIENT:** Not available

**VOLATILE ORGANIC COMPOUNDS:** Negligible

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**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. Contact Safety-Kleen regarding proper recycling or disposal.

**USEPA WASTE CODE(S):** 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 the user may change the waste code(s) applicable to the disposal of this product.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** Shipping Name: Not regulated as a hazardous material.

**TDG:** Shipping Name: Not regulated as a dangerous good.

**EMERGENCY RESPONSE GUIDE NUMBER:** Not applicable.

**SECTION 15: REGULATORY INFORMATION**

**USA REGULATIONS**

**SARA SECTIONS 302 AND 304:** Based on the ingredient(s) listed in **SECTION 3**, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA SECTIONS 311 AND 312:** This product poses the following health hazard(s) as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):  
Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard

**SARA SECTION 313:** This product does not contain "toxic" chemical(s) subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

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**CERCLA:** Based on the ingredient(s) listed in **SECTION 3**, this product does not contain any "hazardous substances" listed pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**TSCA:** All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or are exempted from the requirement to be listed on, the TSCA Inventory.

**CALIFORNIA:** This product is not for sale or use in the State of California.

**CANADIAN REGULATIONS**

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

**CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):** The components of this product are listed on, or are automatically included as "substance occurring in nature" on, or are exempted from the requirements to be listed on, the Canadian Domestic Substances List (DSL).

**SECTION 16. OTHER INFORMATION**

**REVISION INFORMATION:** Regulatory review.

**LABEL/OTHER INFORMATION:** Not available.

User assumes all risks incident to the use of this (these) product(s). To the best of our knowledge, the information contained herein is accurate. However, Safety-Kleen assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either express or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product(s) as supplied to the user.



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