

# **FIRST LINE** PREMIUM AW HYDRAULIC FLUIDS

*“ The First Line of Defense Against Wear. ”*

## **PRODUCT DESCRIPTION:**

**First Line Anti-Wear (AW) Hydraulic fluids** are superior anti-wear hydraulic and circulating fluids especially formulated from paraffinic base oils to provide excellent thermal and oxidative stability in virtually all machine lubrication and hydraulic fluid applications.

**First Line AW Hydraulic oils** are premium products formulated with an effective anti-wear compound compatible with bearing components for hydraulic or circulating systems requiring high quality anti-wear oils, such as those recommended by hydraulic pump and machine tool manufacturers.

## **APPLICATION:**

- Hydraulic oil systems, particularly those utilizing positive displacement, high speed/pressure pumps.
- Circulating oil systems.
- General machine lubrication.

## **APPROVALS:**

- Denison HF-0, HF-1, HF-2
- GM LS-2
- Vickers M-2950-S (Mobile) and I-286-S (Industrial)
- Cincinnati Machine P-68 ISO 32, P-69 ISO 68, P-70 ISO 46

## **FEATURES & BENEFITS:**

- Outstanding protection against wear, rust and corrosion
- Extended system life
- Excellent oxidation resistance over long service periods, even with low make-up rates
- Superior demulsibility
- Rapid air separation
- Long-term hydrolytic stability
- Long-term thermal stability
- Excellent filterability

PREMIUM PROTECTION AGAINST WEAR, RUST, AND CORROSION  
CONSULT OWNER'S MANUAL FOR FLUID RECOMMENDATIONS

Test	Typical Inspections			
	32	46	68	100
Viscosity, CST @ 40C	31.59	47.74	67.2	90.7
Viscosity, CST @ 100C	5.36	6.92	8.43	10.46
Viscosity Index	102	100	94	97
API Gravity, 60F	31.5	30.5	30	29.3
Flash, COC, C (F)	210 (410)	238 (460)	243 (470)	249 (480)
Pour, C (F)	-26 (-15)	-26 (-15)	-26 (-15)	-21 (-5)
Oxidation Stability (hrs)	> 6000	> 6000	> 6000	> 6000

The values shown here are typical of current production. All of them may vary within modest ranges.

**Hazards:** “Empty” containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressure, cut weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks or other sources of ignition. “Empty” drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner.

Avoid prolonged contact with skin and frequently change soiled clothing. In case of contact, wash thoroughly with soap and water for 15 minutes or until the irritation subsides. The formation of mists should be avoided. Do not take internally. If swallowed, do not induce vomiting. Call physician or Poison Control Center immediately. Keep out of reach of children.