

# Clarity® Hydraulic Oil AW 100



#### **Description**

Clarity® Hydraulic Oil AW 100 is a high performance hydraulic oil designed with premium base oil technology in combination with an advanced zinc-free ashless additive system. It offers robust oxidation stability, water separation, foam suppression with dependable wear, rust and corrosion protection to both mobile and stationary hydraulic vane, piston and gear-type pumps operating in industrial applications and in environmentally sensitive areas. It is well-suited to applications where yellow metals are present in hydraulic systems. Clarity Hydraulic Oil AW 100 is a shear-stable high VI hydraulic oil designed to improve equipment efficiency and increase the operating temperature range.

## **Typical Characteristics**

ISO Viscosity Grade	100	
MPID	219611	
Kinematic viscosity at 40°C, mm <sup>2</sup> /s	100.0	
Kinematic viscosity at 100°C, mm <sup>2</sup> /s	13.8	
Viscosity Index	145	
Pour point, °C	<b>-</b> 40	
Flash point COC, °C	266	
Copper Corrosion, 3h/150°C	1B	

# **Recommended Applications**

Clarity Hydraulic Oil AW 100 is designed to give reliable protection in mobile and stationary hydraulic vane, piston and gear-type pumps operating in high performance industrial applications as well as in environmentally sensitive areas. Many hydraulic systems are required to operate in environmentally sensitive areas where leaks or spills of hydraulic fluid may result in contamination of the soil or nearby waterways. Unlike Clarity Hydraulic Oil AW 100, conventional anti-wear hydraulic oils are formulated with metal-containing performance additives which can persist in the environment. Clarity Hydraulic Oil AW 100 is designed to meet or exceed the performance requirements of conventional anti-wear hydraulic oils, especially insevere, high-output applications such as axial piston pumps. The anti-wear performance of this oil makes it especially suited for high performance applications utilising axial piston pumps where pressures may exceed 5,000 psi. Clarity Hydraulic Oil AW 100 has offered good performance in applications involving servo-valves using multi-metal components.

# **Clarity Hydraulic Oil AW 100 Is Approved For:**

**☑ Blohm+Voss** Stern tube applications **☑ Wärtsilä-Japan** Stern tube applications

## **Clarity Hydraulic Oil AW 100 Meets The Requirements Of:**

**☑ DIN 51524-2** (HLP) **☑ ISO** (11158 L-HV)

**☑ DIN 51524-3** (HVLP) **☑ Eaton Vickers** (M-2950-S, I-286-S)

**✓ ASTM** (D6158, HV)



#### **Performance Benefits**

#### 1. Premium Performance

High performance ashless formulation is designed to meet or exceed major vane, piston and gear pump manufacturers' requirements for viscosity, rust and corrosion protection, hydrolytic stability, water separability, foam inhibition, and filterability.

#### 2. Long Oil Life

Offers robust oxidation stability and longer service life than conventional zinc-based anti-wear or vegetable oilbased hydraulic oils.

#### 3. Wear Protection

Reliable anti-wear formulation helps optimise wear protection in high efficiency, high speed, high temperatureand high output equipment.

### 4. Environmental Sensitivity

Designed for low toxicity, biodegradable<sup>1</sup> performance and has very low acute aquatic toxicity to both fish and invertebrates based on tests of water accommodated fractions. Ashless formulation facilitates conventional recycling programs.

#### 5. Zinc-free

Zinc-free, ashless design helps protect in applications where yellow metals are present in piston pumps.

1. As determined by OECD 301D (Closed Bottle Biodegradability Test), Chevron Clarity Hydraulic Oil AW 100 was shown to be inherently biodegradable. This test is normally run for 28 days. After completing this test period, Chevron Clarity Hydraulic Oil AW 100 was 38% degraded. Degradation of 20–59% after 28 days in OECD 301D is evidence that a product is inherently biodegradable. Chevron Clarity Hydraulic Oil AW 100 did not meet the criteria for readily biodegradable, which is a degradation of >60% after 28 days in OECD 301D.



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