



Clarity[®] Synthetic Hydraulic Oil AW

Description

Clarity[®] Synthetic Hydraulic Oil AW is designed to give maximum protection in both mobile and stationary hydraulic equipment in industrial applications, as well as in environmentally sensitive areas. Clarity Synthetic Hydraulic Oil AW is formulated with synthetic base stock and an ashless, zinc-free additive system that provides exceptional oxidation stability, water separability, foam suppression, and protection against wear, rust and corrosion. Clarity Synthetic Hydraulic Oil AW is designed to meet or exceed the performance requirements of conventional antiwear hydraulic oils, especially in severe, high-output applications such as axial piston pumps, while providing an additional level of safety in case of leaks or incidental discharge to the environment.

Typical Test Data

Viscosity Grade	Clarity Synthetic Hydraulic Oil AW		
	ISO 32	ISO 46	ISO 68
Viscosity, Kinematic cSt at 40°C	32.5	46.5	68.0
Viscosity, Kinematic cSt at 100°C	7.0	9.3	11.4
Viscosity Index	186	186	162
Flash Point, °C	228	230	218
Pour Point, °C	-48	-42	-45
Specific Gravity at 15.6°C	0.84	0.85	0.85
FZG test (A/8.3/90), failure load stage	11	≥12	≥12

Recommended Uses

Clarity Synthetic Hydraulic Oil AW is designed for use in mobile and stationary hydraulic vane-, piston-, and gear-type pumps. The antiwear performance of Clarity Synthetic Hydraulic Oil AW makes it especially suited for high performance industrial applications utilizing axial piston pumps where pressures may exceed 5000 psi. It has a viscosity index much higher than typical conventional antiwear hydraulic oils, provides excellent flow at low temperatures, and good oil film protection at high operating temperatures. Clarity Synthetic Hydraulic Oil AW is well suited for applications situated in environmentally sensitive areas. The ISO 32 and ISO 46 formulations of this product have excellent low-temperature pumpability properties that extend to temperatures as low as -30°C (-22°F). Clarity Synthetic Hydraulic Oil AW meets the most severe requirements of major hydraulic equipment manufacturers, including Eaton-Vickers M-2950-S (mobile) and I-286-S (stationary), Eaton-Vickers 35VQ25 pump test, DIN 51524 Part 3 (HVL), McGregor Hatch Cover Systems (VG 32), and Cincinnati Milacron P-68 (VG 32), P-70 (VG 46) and P-69 (VG 68). The ISO 46 grade is approved for Frank Mohn/FRAMO hydraulic cargo pumping systems.

Performance Benefits

1. Premium Performance

Ashless formulation provides excellent wear protection, rust and corrosion protection, hydrolytic stability, water separability, foam inhibition, and filterability.

2. Long Oil Life

Outstanding ability of the synthetic base stock to withstand oxidation at high operating temperatures results in maximum service life for the oil.

3. Excellent Wear Protection at Startup

Minimum change in viscosity over wide operating temperatures due to high viscosity index. Multiviscosity performance minimizes the need to change viscosity grades for seasonal changes.

4. Environmental Sensitivity

Very low acute aquatic toxicity to both fish and invertebrates based on tests of water accommodated fractions. Ashless formulation facilitates conventional recycling programs.

5. Excellent Low Temperature Pumpability

The ISO 32 and ISO 46 formulations are specifically developed to ensure good low temperature fluidity for low temperature operations as low as -30°C (-22°F).

6. Zinc-free

Suited for applications involving yellow metals found in axial piston pumps.