



# Super S<sup>®</sup> All-Season Multi-Vis AW Hydraulic Fluid

**Super S<sup>®</sup> Multi-Vis AW Hydraulic Fluid** is a high viscosity index hydraulic oil for use in mobile and industrial equipment operated in a wide range of temperature climates. It is available in 2 grades (5W-20 and 10W-30) to match almost any application. **Super S<sup>®</sup> Multi-Vis** formulation offers superior shear stability performance over ISO grade fluids. The naturally heat-resistant base oils resist thermal break-down and maintain their protective viscosity, allowing formation of a strong lubricating film for excellent wear protection.

**Super S<sup>®</sup> Multi-Vis AW Hydraulic Fluid** is a premium anti-wear hydraulic fluid with outstanding low temperature characteristics. Because it doesn't contain the waxes inherent to conventional fluids, it flows more readily in cold temperatures, meaning bearings and other components receive almost immediate lubrication at start up, reducing long-term wear and instances of pressure spikes and erratic operation as a result of poor fluidity.

**Super S<sup>®</sup> Multi-Vis Hydraulic Fluids** are fortified with a zinc containing anti-wear additive which is molecularly engineered to reduce varnish. It initiates a chemical reaction with the building blocks that are the foundation for varnish formation neutralizing the source and extending the service life of both the oil and equipment. The zinc component, by way of ZDDP, provides excellent anti-wear and mild extreme pressure performance which is compatible with yellow metals and most other alloys found in early and late model construction equipment giving it a very broad application range.

## APPLICATIONS

**Super S<sup>®</sup> Multi VIS AW Hydraulic Fluid** is suitable for use in:

- High and low pressure hydraulic or circulating oil systems operating at high pressures and temperatures in critical applications, in- and outdoors
- Where a Multi-Grade hydraulic fluid can simplify oil selection, improve low temperature performance and have enough viscosity to operate in warmer ambient conditions
- Systems requiring a high degree of foam control, rust and corrosion protection, load-carrying capability, and anti-wear protection
- Stationary and mobile hydraulic systems including those with bronze metallurgy

## FEATURES/ BENEFITS

- **Stable, high-performance anti-wear additives** - Helps reduce wear and protects pumps and components and extend equipment life
- **Excellent protection against rust and corrosion** - Oil-wetted parts, ferrous and non-ferrous, are provided with enhanced protection from rust, corrosion and the effects of oxidation
- **High viscosity index** - Offers additional protection for the pump over a wider operating temperature range for true all-season protection
- **Excellent shear stability for stay in grade performance** - Enhanced to help provide the required oil film to protect parts, over a long service life.
- **Excellent hydrolytic stability** - Designed to resist the decomposition reaction caused by water, that can lead to the formation of acidic and corrosive materials
- **Excellent anti-wear properties** - Robust thin-film formation which protects system components for extended service life
- **Rapid air release and powerful foam control** - Help to prevent destructive cavitation, aeration and resulting heat, and extend oil life
- **Rapid Demulsification of water** - Proven to help prevent corrosion and extend equipment life
- **Good elastomer and seal compatibility** - Long seal life for reduced maintenance and downtime

## SPECIFICATIONS/RECOMMENDATIONS

**Super S<sup>®</sup> Multi VIS AW Hydraulic Fluid** meets the performance standards of:

*Eaton-Vickers I-286-S, M 2950-S*

*Racine Model S*

*Denison HF-0, HF-1, HF-2*

*Cincinnati Machine P-69(5W-20), P-70(10W-30)*

*DIN 51524 Parts 2 & 3*

**TYPICAL CHARACTERISTICS**

<b>SUPER S® MULTI-VIS AW HYDRAULIC FLUID</b>			
<i>Properties</i>	<i>Test Method ASTM D-</i>	<i>5W-20</i>	<i>10W-30</i>
ISO Viscosity Grade	1298	46	68
Viscosity @ °40C, cSt @ °100C, cSt	445 1445	46 7.8	66.5 9.9
Viscosity Index	2270	139	132
Flash Point °F	92	390	394
Pour Point °F	97	-49	-43
Oxidation Test Hours to 2.0 Acid Number	943	5000+	5000+
Low Temperature Pump-ability	DS57	Pass	Pass
Dielectric, min. KV	877	+35	+35
Rust Test	665B	Pass	Pass

Typical test data are average values only.

Minor variations which do not affect product performance are to be expected during normal manufacturing.

**Special handling, notices or warnings**

Use the care and handling used for petroleum products