Technical Data Sheet (TDS)
MD Oils Hydraulic Oil AW-68
Premium Anti-Wear Hydraulic Oil

DESCRIPTION

MD Oils Hydraulic Oil AW-68 is a premium high-performance anti-wear hydraulic fluid formulated with high-quality base oils and advanced additive technology. It is engineered for severe-duty hydraulic systems operating under high loads and elevated temperatures. Its advanced formulation ensures consistent power transmission and robust protection across demanding industrial and mobile applications.

APPLICATIONS

MD Oils Hydraulic Oil AW-68 is recommended for heavily loaded hydraulic systems operating under high temperatures and severe service conditions in industrial, construction, mining, marine, and heavy-duty mobile equipment applications. It is particularly suitable for large presses, heavy industrial machinery, and hydraulicsystems requiring a thicker lubricating film and enhanced load-carrying performance.

Performance Features and Benefits

- Exceptional Anti-Wear Protection: Significantly reduces wear in high-pressure pumps and components, extending equipment service life.
- Outstanding Thermal & Oxidation Stability: Resists thermal degradation and oxidation at elevated temperatures, minimizing sludge formation and supporting longer oil drain intervals.
- Optimized Film Strength & Load Capacity: Maintains a durable lubricating film, delivering superior load-carrying performance in heavy-duty applications such as large presses, mining, and construction equipment.
- Advanced Air Release & Anti-Foaming Properties: Prevents pump cavitation and ensures smooth, stable, and responsive hydraulic system operation under severe conditions.
- Robust Multi-Metal Protection: Provides effective rust and corrosion protection for internal components, even in humid, marine, and harsh industrial environments.

Recommendations / Specifications: Meets or exceeds the requirements of:

- DIN 51524-2 (HM); DIN 51524-3 (HV); ISO 11158 (HM, HV); ASTM D6158 (HM, HV); GB 11118.1-2011 (L-HL, L-HM, L-HV, L-HS); SAE MS 1004
- Bosch Rexroth RDE 90235; Parker (formerly Denison) HF-0, HF-1, HF-2 (HM, HV); Eaton E-FDGN-TB002-E; Fives P68, P69, P70 (HM, HV)
- AIST 126, 127; SEB 181222; GM LS-2
- JCMAS P041 HK Hydraulic specification

Typical Characteristics

Properties	Unit	Test Method	Typical Values
ISO Viscosity Grade	-	ISO 3448	68
Appearance	-	Visual	Bright & Clear
Density @ 15˚C	g/cm³	ASTM D4052	0.887
Kinematic Viscosity @ 40˚C	mm²/s	ASTM D445	68.83
Kinematic Viscosity @ 100°C	mm²/s	ASTM D445	8.92
Viscosity Index	-	ASTM D2270	103
Flash Point (COC)	˚C	ASTM D92	242
Pour Point	˚C	ASTM D97	-24
Demulsibility @ 54 ˚C	min	ASTM D1401	40-40-0 (11min)
Foaming Characteristics Sequence I	mL	ASTM D892	0/0
Copper strip corrosion, 3 hrs @ 100˚C	-	ASTM D130	1B
Rust protection (Procedure B)	-	ASTM D665	PASS

- **Note**: The typical characteristics shown in this document are representative of current production. While future production will conform to MD Oils specifications, variations in these characteristics may occur within normal manufacturing tolerances.
- **Health & Safety**: Based on available information, this product is not expected to cause adverse health effects when used for its intended application and in accordance with the recommendations provided in the Safety Data Sheet (SDS). SDS are available on request through your local sales office or via our website.
- This product should not be used for applications other than its intended purpose. When disposing of used product, take care to protect the environment and comply with local regulations.