

All Weather Hydraulic Oils

(November 2019 edition)

AMALIE All Weather Hydraulic Oils are formulated with highly refined base stocks and chemical components to control wear, oxidation, sludge, corrosion, foaming, and to promote water separation. These oils are designed to lubricate hydraulic systems that require wear protection, rust protection, and antioxidant performance. They are specifically formulated to provide robust pump and filtration performance in excess of 5,000 hours, even in the presence of incidental water contamination. **AMALIE All Weather Hydraulic Oils** are formulated to exceed the requirements of pump, filter and control valve OEMs. These oils provide protection to hydraulic systems employing vane, gear and other types of pumps that require anti-wear (boundary-type) protection.

Benefits

- Excellent Performance for Vane, Gear, Axial and Radial Piston Pumps
- Extended Service Life as Demonstrated by ASTM D943 TOST >5000 hr
- Pump Protection Through Anti-Wear Performance Exceeding Industry OEM Pump Specification Tests
- Offers High Resistance to Rust and Corrosion
- Excellent Foam Suppression Reducing Pump Failure Due to Cavitation

Typical Properties

ISO Grade	15	22	32	46	68	100	150	220
Specific Gravity	0.846	0.855	0.863	0.867	0.873	0.877	0.882	0.886
100°C Viscosity, cSt.	3.4	4.3	5.4	6.8	8.8	11.3	15	19.4
40°C Viscosity, cSt.	15	22	32	46	68	100	150	220
Viscosity Index	101	100	102	102	100	100	100	100
Pour Point, °C	-30	-30	-33	-30	-27	-24	-18	-15
Oxidation Life TOST, hr.	>5000	>5000	>5000	>5000	>5000	>5000	>5000	>5000

Applications

AMALIE All Weather Hydraulic Oils are formulated to meet or exceed the following National and OEM specification requirements.

ASTM D6158 HL, HM	ISO 11158 HL, HM
Bosch Rexroth RDE-90235, 90220	JCMAS HK P041
Chinese Standard GB 11118.1 L-HL, L-HM	Parker Denison HF-1, HF-2, HF-0
Danieli 0.000.001 Type 10 & 11	SAE MS1004
DIN 51524 PART 1,2	SWEDISH STANDARD SS 155434:2015
Eaton 03-401-2010	U.S. Steel 126
Eaton E-FDGN-TB002-E	Vickers MS-2950, I-2860, 35VQ25
Fives Cincinnati P-68, P-69 & P-70	ZF TE-ML 07H
GM LS-2 Antiwear Hydraulic Oil	ZF TE-ML 21M

Some specifications are ISO Grade specific. Please reference you OEM manual to select the correct ISO Grade.

Additional Information

Please use proper handling and care that you would use with any hydraulic fluid. Contact your AMALIE Sales Representative for SDS.