

All-Climate Multi-Vis Hydraulic Oils

(July 2021 edition)

AMALIE All-Climate Multi-Vis Hydraulic Oils are formulated using high viscosity index base stocks, a shear stable viscosity modifier and chemical components to control wear, oxidation, sludge, corrosion, foaming, and to promote water separation. They are designed for applications where a wide range of temperature operation is needed as well as wear protection, rust protection, and anti-oxidant performance. They provide robust pump and filtration performance in excess of 5,000 hours, even in the presence of incidental water contamination. **AMALIE All-Climate Multi-Vis Hydraulic Oils** provide protection to hydraulic systems employing vane, gear and other types of pumps that require anti-wear (boundary-type) protection.

Benefits

- Shear Stable
- Oxidation Resistance Even in the Presence of Contaminants ASTM D943 TOST >5000 hr
- High Resistance to Rust and Corrosion
- Excellent Foam Suppression
- Rapid Water Separation

Typical Properties

ISO Grade	15	22	32	46	68	100
Specific Gravity	0.866	0.852	0.858	0.862	0.865	0.866
100°C Viscosity, cSt.	3.8	4.8	6.2	7.9	10.6	14.6
40°C Viscosity, cSt.	15	22	32	46	68	100
Viscosity Index	150	145	145	145	145	150
Pour Point, °C	-45	-45	-45	-45	-45	-42
Oxidation Life TOST, hr.	>5000	>5000	>5000	>5000	>5000	>5000

Typical values are listed. Variations not affecting the performance of this fluid may occur during production.

Applications

AMALIE All-Climate Multi-Vis Hydraulic Oils are formulated to meet or exceed the following National and OEM specification requirements.

ASTM D6158 HL, HM, HV	ISO 11158 HL, HM, HV
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, 3	SWEDISH STANDARD SS 155434:2015
Eaton O3-401-2010	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 your 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.