

# Goldenstone® MHV

## Technical Data Sheet (TDS)

### Antiwear multigrade hydraulic oils

#### Description and application

GOLDENSTONE® MHV hydraulic oils are formulated from highly refined mineral base stocks exhibiting very good demulsibility and air-release properties blended with a highly efficient additive system including rust, oxidation and corrosion inhibitors, anti-wear agents and a polymethacrylate VII (Viscosity Index Improver).

GOLDENSTONE® MHV lubricants are suitable for use in hydraulic systems subjected to widely varying temperatures from minus 30°C to +50°C, i.e. as in the open. They are intended for use in hydrostatic lubrication systems and moving parts in circulating systems, demanding lubricants with very high oxidation stability, improved anti-wear and anti-scuffing properties, good R&O protection and high shear stability. Oils are suitable for use in hydraulic systems hydraulic vane pumps, hydraulic gear pumps and hydraulic piston units.

Thanks to the high quality base oils and additives used in the formulation of these oils they are well suited for hydraulic system operated at very high pressures exceeding 25 MPa and oil temperatures exceeding 90°C

#### Benefits

- High viscosity index
- Maximum equipment protection at widely varying temperatures
- Extremely stable at low temperature

ISO 3448	VG 15, 22, 32, 46, 68, 100
ISO 11158	HV
DIN 51524	Part 3 (HVLP)
US Steel	127 (VG 32, 46, 68)
Denison	HF-O (including Denison T6C pump test), HF-1 & HF-2
Vickers	M-2950-S, I-286-S

#### Specifications

ISO 6743/4	ISO-L-HV
------------	----------

#### Typical characteristics

Parameter	Test Method	Typical Value					
		15	22	32	46	68	100
Density at 20°C, g/ml	EN ISO 3675	0.866	0.867	0.868	0.875	0.879	0.883
Kinematic viscosity at 40°C, mm <sup>2</sup> /s	EN ISO 3104	15	22	32	46	68	100
Viscosity index	ISO 2909	170	140	150	150	145	140
Flash point, COC, °C	EN ISO 2592	140	160	190	200	210	220
Pour point, °C	ISO 3016	-39	-39	-39	-35	-35	-27
Copper strip corrosion, 3h, 100°C	EN ISO 2160	1					
Water separability -time to 3 ml emulsion, min	ISO 6614	10	10	10	15	15	15
Air release properties, min	ISO 9120	3	3	4	6	8	10
Oxidation stability after 1000h TAN increase, mg KOH/g	ASTM D 4310	< 1					

FZG EP Wear Test (A 8.3/90) - Failure Load Stage	DIN 51354-2	-	12	12	12	12	12
---	-------------	---	----	----	----	----	----

Important note: Typical data values do not constitute a specification but are an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved.

## Health, Safety and Handling

Based on current available information, this product is not expected to produce adverse effects on health when used for the intended application.

For more information about product MSDS, terms and conditions for storage and shelf life please visit:

[www.goldenstoneoils.com](http://www.goldenstoneoils.com)