



ISO VG 32, 46, 68, 100

Product Description

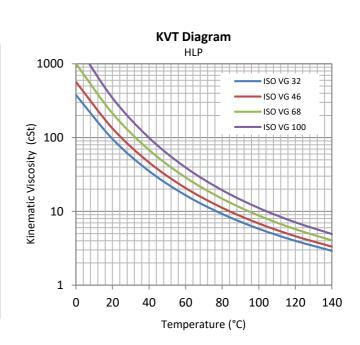
High performance hydraulic fluids formulated with anti-wear and anti-oxidation additives. HLP provides satisfied protection and maintains efficiency in hydraulic system.

Benefits

- Good wear and corrosion protection helps extend component life, enable long oil and filter life.
- Good thermal and oxidation stability helps reduce deposit and provide system cleanliness resulting in cost and maintenance downtime reduction.

Applications

- Suitable for use in general hydraulic systems that frequent routine oil top-up is preferable.
- Recommended for use in light or moderate duty applications.



The Moving Innovation





ISO VG 32, 46, 68, 100

sts v at 40 °C	Methods ASTM D 445	Units	32		ults			
∕ at 40 °C	ASTM D 445		32	40	Results			
∕ at 40 °C	ASTM D 445			46	68	100		
	A3 1 W D 443	mm²/s	32.05	45.92	68.08	99.21		
at 100 °C	ASTM D 445	mm²/s	5.446	6.848	8.776	11.10		
	ASTM D 2270		104	101	101	97		
	ASTM D 4052	g/cm ³	0.8697	0.8753	0.8810	0.8861		
	ASTM D 92	°C	236	240	248	270		
	ASTM D 97	°C	-9	-9	-6	-6		
sion	ASTM D 130		1a	1a	1a	1a		
eq. I	ASTM D 892	ml/ml	0/0	5/0	5/0	5/0		
eq. II	ASTM D 892	ml/ml	0/0	20/0	20/0	0/0		
eq. III	ASTM D 892	ml/ml	0/0	5/0	10/0	5/0		
•	sion eq. I eq. II	ASTM D 2270 ASTM D 4052 ASTM D 92 ASTM D 97 ASTM D 130 eq. I ASTM D 892 eq. II ASTM D 892	ASTM D 2270 ASTM D 4052 g/cm³ ASTM D 92 °C ASTM D 97 °C ASTM D 130 eq. I ASTM D 892 ml/ml eq. II ASTM D 892 ml/ml	ASTM D 2270 104 ASTM D 4052 g/cm³ 0.8697 ASTM D 92 °C 236 ASTM D 97 °C -9 sion ASTM D 130 1a eq. I ASTM D 892 ml/ml 0/0 eq. II ASTM D 892 ml/ml 0/0	ASTM D 2270 104 101 ASTM D 4052 g/cm³ 0.8697 0.8753 ASTM D 92 °C 236 240 ASTM D 97 °C -9 -9 sion ASTM D 130 1a 1a eq. I ASTM D 892 ml/ml 0/0 5/0 eq. II ASTM D 892 ml/ml 0/0 20/0	ASTM D 2270 ASTM D 4052 BYCM ASTM D 4052 ASTM D 92 C 236 C 240 C 248 ASTM D 97 C -9 C		

Performance Standards

- **Denison HF-2**
- **Eaton Vickers I-286-S**
- DIN 51524 Part 2 HLP Type
- **ISO 11158 Category HM**

Health and Safety

This product shows no significant health or safety hazard when used under the recommended applications and suitable handling.

Avoid the direct contact. Wash immediately after contact. Health and safety information is available on the Safety Data Sheet (SDS) which can be obtained from http://pttlubricants.pttor.com





Note: Data and information contained in this publication are based on standard test under laboratory conditions and/or performance test. To consider the use of PTT Lubricants' products in particular application, customer is responsible for determining whether product and information are appropriate for customer conditions or should consult with PTT Lubricants' technical service division. The procedure of using any lubricant may differ or change depended on different machines and their manuals. Therefore, we recommend to read, understand and review the latest SDS in order to ensure the use of product is accomplished safety.

The Moving Innovation