



ZF HYDRAULIC OILS 32 - 150

PRODUCT DESCRIPTION

Hi-Tec ZF Hydraulic Oils are zinc free, ashless, anti-wear lubricants blended from high quality mineral oils possessing a high viscosity index and low pour point. These lubricants give a long trouble free service life and will be chemically stable under severe operating conditions. They give excellent protection against corrosion, resisting emulsification and any formation of unwanted stable foam.

The continuing trend towards higher hydraulic system pressure permits higher performance and reductions in pump and equipment sizes. At the same time, the hard working hydraulic oil is called upon to lubricate, seal and cool the working components under increasing temperature, turbulence and pressure. The continuing need to maintain performance over extended service intervals requires that the specification of additive systems also continues to advance.

Hi-Tec ZF Hydraulic Oils are formulated to meet all these requirements, using paraffinic, high viscosity index mineral oil, augmented with performance additives including a special ashless multifunctional oxidation, rust and wear inhibiting additive package.

BENEFITS

The performance benefits of this formulation include:

- Superior thermal and hydrolytic stability
- Very high oxidation stability
- Good demulsibility and anti-foam properties
- High load carrying capacity - excellent EP performance
- Excellent corrosion protection for steel and non-ferrous metals
- Good filterability - lower tendency to block filters
- Reduced pump wear

SPECIFICATIONS

Hi-Tec ZF Hydraulic Oils meet or exceed the requirements of many international tests and specifications for industrial and mobile hydraulic and compressor systems including:

- AFNOR NFE 48-603 (HM, HV)
- Cincinnati Machine P-68, P-69, P-70
- Denison HF-0, HF-1, HF-2
- DIN 51524, parts 1, 2 (HL, HLP)
- DIN 51506 (VBL, VCL, VDL)
- ISO11158 (HM)
- ISO 6743/4 (HM)
- ISO/DP 6521 (DAA, DAB, DAH, DAG)
- Parker Hannifin France HF-0
- SEB 181 222
- Sperry Vickers I-286-S, M-2950-S
- SS 155434
- US Steel 126, 127 and 136
- VDMA 24318

Hi-Tec suggests that the equipment manufacturers' recommendations for viscosity grade, performance requirements and general operating conditions should be checked prior to use.

TYPICAL PROPERTY	ASTM METHOD	RESULTS				
ISO Viscosity		32	46	68	100	150
Item Code (HI5-)		2758	2761	2763	2765	2767
Appearance --	Visual	<----- Clear, bright ----->				
Density (kg/Lt) @ 15°C	D-1298	0.865	0.882	0.884	0.890	0.900
Viscosity (cSt) @ 40°C	cSt	D-445	32	46	68	100 150
Viscosity (cSt) @ 100°C	D-445	5.5	6.9	8.9	11.4	19.6
Viscosity Index	D-2270	107	105	104	100	98
Sulfated Ash (% wt)	D-874	<----- Less than 0.01 ----->				
Copper Strip; 3hr @ 100 °C	D-130	1a	1a	1a	1a	1a
FZG Load; Fail Stage	DIN 51534	12	12	12	12	12
Rust Characteristics	D-665 A/B	<----- Pass ----->				
Flash Point (°C)	D-92	<----- 200 ----->				
Pour Point (°C)	D-97	-27	-27	-27	-30	-30