



TECHNICAL DATA

HLP Hydraulic Oils

HLP hydraulic oils are suitable for most hydraulic systems where high levels of anti-wear and protection are required in conjunction with good service life reliability. They are also suitable for a wide range of other applications where machinery lubricants with excellent anti-wear lubrication and resistance to degradation in service are required. Applications can include systems incorporating high speed gears and bearings, pumps, blowers and other uses where this type and quality of lubricant can assist with lubricants rationalisation for the ISO viscosity grades available.

They are formulated from solvent-refined base oils and incorporate additive treatments to provide excellent service life with protection against corrosion, wear, oxidation and foaming.

Features

- Excellent protection of machinery and systems against corrosion and wear
- Excellent service life associated with excellent resistance to oxidation and thermal degradation
- Excellent anti-foam and de-aeration performance
- Compatible and miscible in storage and in service with most other mineral oils
- Good filterability for use in conjunction with most hydraulic and lubricating oil system filters
- They are fully compatible with elastomer materials commonly used for static and dynamic seals, e.g. Nitrile Butyl (perbunan* or buna n*)
- Fluorinated (viton*/teflon*)
- Perfluorinated (kabrez*)
- Polyurethane (adiprene*)
- Polyester (hytrel*)

HLP hydraulic oils meet the performance requirements of the following specifications:

Vickers Pump	(DIN 51354 PART 2)	US Steel	127.136
Cincinatti Milacron	P-68, P-69, P70	DIN	51524 part 1 & 2
Lee Norse	100-1	DIN	51525
AFNOR	NF E 48-603 (HL & HM)		

Typical physical & chemical characteristics

ISO VG	5	10	15	22	32	46	68	100	150	320
Density @15C (kg/l)	0.833	0.848	0.858	0.864	0.859	0.874	0.876	0.882	0.888	0.894
Viscosity @40C (cSt)	5.0	10.0	15.1	22.4	32.4	44.1	65.0	100.1	146.3	322.2
Viscosity @100C (cSt)	-	2.8	3.4	4.3	5.4	6.7	8.7	11.3	14.7	24.8
Viscosity index	-	100	98	95	101	103	99	97	99	98
Appearance	Clear & Bright Liquid									
Sulphur	"	"	"	"	1200 ppm	"	"	"	"	"
Zinc	"	"	"	"	340 ppm	"	"	"	"	"
Phosphorous	"	"	"	"	300 ppm	"	"	"	"	"
Product Code	05290	05010	05020	14120	05030	05040	05060	05080	05090	05036