



## Blue Hydraulic

Anti-wear Hydraulic Range

### Description

Castrol Blue Hydraulic Plus possesses proven anti-wear protection, a high viscosity index to enhance performance over a wide temperature range, and excellent water separation properties. Castrol Blue Hydraulic Plus is formulated with carefully selected premium base oils, coupled with rust, oxidation, and foam inhibitors.

### Application

Castrol Blue Hydraulic Plus provides maximum pump life and trouble free service in construction and mining mobile hydraulic applications. Exceeds all manufacturer's warranty requirements for applications requiring a Dennison HF-O approved hydraulic fluid

Castrol Blue Hydraulic Plus is classified as follows:

DIN 51502 classification - HLP

ISO 6743/4 - Hydraulic Oils Type HM

Blue Hydraulic Plus grades meet the requirements (for appropriate viscosity grade) of:

Parker Hannifin (Denison) HF0, HF1 & HF2

Eaton E-FDGN-TB002-E

Vickers 35VQ25A meets performance requirements/Vickers M-2950-S Mobile Hydraulic Systems and I-286-S Industrial Hydraulic Systems

Fives Cincinnati P68, P69 & P70

Meets Racine S106 and Joy Mining Machinery HO-T (AW 46), HO-S (AW 68)

DIN 51524 Part 2

ASTM D6158 HM

ISO 11158 HM

US Steel 126

GB 11118.1 L-HM (General and High Pressure)

### Advantages

- Superior hydrolytic stability provides additional protection against corrosion and wear when contaminated with water while providing longer pump life and less wear.
- Superior oxidation stability provides:-
  - Resists thermal degradation in the presence of entrained air and catalyzing metals
  - Prevents the formation of sludge and varnish deposits during periods of extended high temperature operation
  - Viscosity stability
  - Resists formation of oxidation acids allowing increased "up-time"
  - Systems operate more efficiently.....Less maintenance costs.
- A carefully balanced rust and corrosion package prevents corrosion and reduces the catalytic effect of contaminants on systems metals and reduces operating costs and prolongs system life
- Water Tolerance:
  - Some commercial hydraulic fluids have caused field failures when contaminated with water. It is important to note that these fluids had previously met the severe performance standards of many pump manufacturers. Castrol Blue Hydraulic Plus Lubricants, which has outstanding performance in many severe OEM pump tests, was subsequently run in modified tests contaminated with 1% water. Results: The Pass/Fail criteria remained the same.

## Typical Characteristics

Name	Method	Units	Plus 32	Plus 46	Plus 68	Plus 100
Appearance	Visual	-	Blue	Blue	Blue	Blue
Specific Gravity @ 15.6°C / 60°F	ISO 3675 / ASTM D1298	g/ml	0.857	0.863	0.879	0.880
Viscosity, Kinematic 40°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	32.1	46.7	68	98.9
Viscosity, Kinematic 100°C	ISO 3104 / ASTM D445	mm <sup>2</sup> /s	5.5	6.97	8.7	11.2
Viscosity Index	ISO 2909 / ASTM D2270	-	107	107	100	100
Flash Point - open cup method	ISO 2592 / ASTM D92	°C/°F	210/410	215/419	226/439	226/439
Pour Point	ISO 3016 / ASTM D97	°C/°F	-27/-15	-26/-15	-26/-15	-26/-15
Oxidation Stability - TOST (Hours to TAN 2.0)	ISO 4263-1 / ASTM D943	Hours	6000+	5000+	5000+	4000+
API Gravity	ASTM D287	-	34	32	29.5	28
Pounds per Gallon	ASTM D287	-	7.12	7.21	7.32	7.39

Subject to usual manufacturing tolerances.