

Balmerol® Protomac HLP 68

Industrial Hydraulic Oil

Product Data Sheet

Product Description

BALMEROL PROTOMAC HLP is premium quality super clean hydraulic oils, blended from highly refined turbine base stocks and synergistic additive systems. PROTOMAC HLP is having outstanding antiwear properties, excellent oxidation stability and high load carrying capacity as determined by FZG ratings. PROTOMAC HLP oils show low wear in vane pump wear test and have good filterability ensuring longer service life. PROTOMAC HLP is formulated to meet CINCINNATI MILACRON P 68, P 69 and P 70, DIN 51524 Pt.2 and DENISON HF-O, HF-2, US Steel 136, 127 specifications.

PROTOMAC HLP 68 is available to cater to the requirements of major hydraulic pump manufacturers. Additional viscosity grades can also be made available to meet specific requirements. PROTOMAC HLP 68 are blended to meet all the requirements of DIN 51524 Pt.2 (HLP type).

Features & Benefits:

Superior oxidation & thermal stability	Ensuring longer service life of fluid under operating conditions
Low deposit forming tendency	Components remain clean during operation, lesser clogging of filters, control valves etc.
Better Anti-wear properties	Reduction in wear of components like pumps, valves etc leading to higher equipment reliability
Very good Rust protection & Demulsibility characteristics	Easily sheds off water from the oil and ensures better component protection

Balmerol Protomac HLP provides excellent protection to hydraulic systems and ensures lower equipment failures, longer oil drain intervals and overall lower maintenance cost.

Applications

BALMEROL PROTOMAC HLP is recommended for use in both high and low pressure hydraulic systems for industrial and mobile applications. PROTOMAC HLP is ideally suited for equipment employed in underground, open cast mines, foundries, steel plants etc and operating under severe conditions of pressure, speed and temperatures. Also suitable for sophisticated high performance electro hydraulic and numerically controlled systems.

Availability

BALMEROL PROTOMAC HLP is available in 209 liter and 20 liter packing.

Technical Data

BALMEROL Protomac HLP 68				
No	Characteristics	Unit	Method	Spesification
1	Appearance	--	Visual	Clear & Bright
2	Colour	--	Visual	Yellow
3	Kinematic Viscosity @ 40°C	Cst	ASTM D-445	61.2 – 74.8
4	Viscosity Index	--	ASTM D-2270	90 min
5	Flash point, COC	°C	ASTM D-92	210 min
6	Emulsion characteristics @ 54 deg C	Minutes	ASTM D-1401	40 – 37 – 3 (30)
7	Foaming tendencies / stabilities			
	a)	Sequence I	MI	ASTM D-892
	b)	Sequence II	MI	
	c)	Sequence III	MI	
8	Pour point	°C	ASTM D-97	(-) 3 max

Health and Safety

Balmerol Protomac HLP is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed.

For further information, contact:

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