



GANESH BENZOPLAST LTD.

HYDRAULIC OIL ADDITIVE (GL 1188)

MULTIPURPOSE ANTIWEAR HYDRAULIC

TECHNICAL DATA SHEET

INTRODUCTION

GL 1188 is a premium antiwear hydraulic additive package designed to provide excellent filterability performance as measured by AFNOR NFE 48-690 and NFE 48-691 procedures. mobile GL 1188 also has very good air release properties required to meet modern fluid requirements.

Developed for both high and low pressure hydraulic systems for industrial and mobile applications GL 1188 is also recommended for formulating thermally stable paper machine oils capable of performing in fine filtration systems.

FORMULATIONS

At 1.25%wt GL 1188 can be used to formulate fluids having outstanding thermal stability and filterability for use in high speed, high temperature paper machines pumps.

At 0.85% - 1.2% wt. GL 1188 is recommended in suitable base stocks to prepare antiwear hydraulic oils meeting most industrial hydraulic SPECIFICATION SHEET.

At a down treat of 0.6% wt., GL 1188 is capable of meeting general industrial SPECIFICATION SHEET such as Denison HF-2 and Vickers I-286-S. performance

APPLICATIONS

Hydraulic fluids formulated with GL 1188 meet or exceed the requirements for industrial and hydraulic systems which call for:

- Denison HF-1, HF-2, HF-O
- DIN 51524, part 2
- Ford M-6C32
- B.F. Goodrich 0152
- o General Motors LH-04-1, LH-06-1, LH-15-1
- Cincinnati Milacron P-68, P-69, P-70
- Vickers I-286-S, M-2950-S
- Commercial Hydraulics*
- Racine, variable volume vane
- US Steel 136, 127



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BENEFITS

- Excellent Hydrolytic Stability
- Excellent wet and dry filterability
- Outstanding thermal and oxidative stability
- Very good demulsibility
- Minimal increases in air entrainment
- o Used for both hydraulics and paper machine oils
- Superior rust protection

TYPICAL PROPERTIES

Specific Gravity @ 15.6°C	1.024
Viscosity, cSt @ 40°C	45
Flash point, ° C., PMCC ASTM D 93	129
TBN GL-NN-29D	36



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SPECIFICATION SHEET

TEST	PROCEDURE	MIN	VALUE	MAX
1. PRIMARY ANALYSIS				
Appearance				
Specific Gravity @ 15.6° C	ASTM D 1298	0.99	1.024	1.028
Viscosity @ 100° C., cst	ASTM D 445		9.39	
Color, ASTM Dilute	ASTM D 1500		4	
% Water	ASTM D 95		0.3	
Blot	GL-BL-1A		PASS	
Clarity	CLARK CLAR.		PASS	
Nitrogen	GL-Ni-6	1.26	1.4	1.54
Phosphorus	GL-AAE-3	3.82	4.22	4.62
Sulfur	GL-SU-6/10	8	8.9	9.8
Zinc, ppm	GL-CNT-1		4.88	
2. SECONDARY ANALYSIS				
Mineral oil	Calculated		15	
Viscosity @ 40° C., cst	ASTM D 445		45	
Flash point, ° C., PMCC	ASTM D 93		129	
H2S Head After STG	3 Days @ 65° c		NEGATIVE	
LBS per GAL @ 15.6 ° C	Calculated		8.37	
Odor	3 Days @ 65° c		STRONG	
Pour Point, ° C.	ASTM D 97		-30	
% Sulfated Ash, ASTM	ASTM D 874		0.75	
TBN	GL-NN-29D		36	