



Baum's Castorine Company, Inc.

Manufacturing Chemists Since 1879

HEAVY DUTY HYDRAULIC OILS

Specifications

	400-TH	500-TH	600-TH	2500-TH
ISO Grade	150	220	320	460
Viscosity Index, Min.	95	95	95	95
Viscosity @ 100° F,SUS	775	1100	1400	2600
Viscosity @ 210° F,SUS	77	93	107	150/160
A.S.T.M. Color	3.5	4	5	5
Flash ° F.	490	535	550	580
Fire ° F.	535	595	605	630
Pour Point, ° F.	+5	+5	+5	+5
A.P.I. Gravity	27.7	27.1	26.8	26
Carbon Res.,%Base Stock	.18	.19	.19	.30
Zinc, % wt.	.06	.06	.06	.06

Additive Treatment: Oxidation inhibitor – Rust inhibitor – Anti-Foam agent-Special non-gumming Castor Lubricity Additive – Anti-wear additive – Pour Point Depressant

TENA-FILM HEAVY DUTY HYDRAULIC OILS are high gravity oils of 100% paraffin extraction dewaxed in the refining process to prevent gumming. This special oil is compounded with a unique additive system to make a premium anti-wear hydraulic oil for both high and low pressure systems for industrial mobile applications.

PERFORMANCE: CASTORINE TENA-FILM TH HYDRAULIC OILS meet or exceed the requirements for the following industrial and mobile hydraulic systems.

Sperry Vickers I-286-S, M-2950-S	Lee-Norse 100-1
Denison HF-1, HF-2, HF-O	Jeffrey No. 87
Racine Model S, variable volume vane pump	U.S. Steel 137, 127
Cincinnati Milacron P-68, P-69, P-70	Ford M-6C 32
DIN 51524, Part 2	B.F. Goodrich 0152
General Motors LH-04-1, LH-06-1, LH-15-1	

BENEFITS:

Proven field performance	Good demulsifiability
Outstanding thermal and oxidation stability	Excellent rust protection
Superior hydrolytic stability	Low filter blockage tendency

GEAR SERVICE API GL-1 meets the requirements of API GL-1 Gear Service for spiral bevel, worm, and manual transmissions that require no EP additives. Fabco transfer cases, Fuller transmissions, Spicer transmissions, and Warner manual shift transmissions are some of the units that require GL-1 oils.

VISCOSITY GRADES:

Tena-Film 400-TH	SAE 90	above 10° F (-12° C)
Tena-Film 500-TH	SAE 90	above 10° F (-12° C)

PERFORMANCE DATA

PERFORMANCE

SPECIFICATION

Denison

T5D Vane	HF – 0	PASS
P-46 Piston	HF – 0	PASS

Vickers

35VQ – 25 Pump (3000 psi, 2400 rpm, 200° F.)	M-2950-S	PASS
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Vickers V-104C Vane

ASTM D-2882	PASS
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Racine, Vane

S SERIES Variable Volume	PASS
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Turbine Oil Rust Test

ASTM D-665	
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Procedure A – Distilled Water	PASS
Procedure B – Synthetic Sea Water	PASS

Foam Test

ASTM D-892	
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Allowable Foam after 10 minutes – none	PASS
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Turbine Oil Oxidation

ASTM D-943

Hours to 2.0 NNA	2600+
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Sludge and Metal Corrosion Test

ASTM D-943 (1000 HR)	
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	<u>HF – 2</u>	<u>HF – 0</u>	
NNA	2.0 Max.	2.0 Max.	.28
Insoluble Sludge, mg	400 Max.	200 Max.	56
Total Copper, mg	200 Max.	50 Max.	47
Total Iron, mg	100 Max.	50 Max.	0.40

Hydrolytic Stability

<u>HF – 2</u>	<u>HF – 0</u>	
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Copper Weight Loss, mg/cm ²	.05 Max.	0.2 Max.	.05
Copper Appearance	ASTM D-130		1A
Acidity of Water Layer mg KOH	6.0 Max.	4.0 Max.	BASIC

Cincinnati Milacron Thermal Stability

CM Spec Limit	
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(168 hr., 275° F., copper -steel catalyst)

Sludge, mg/100 ml	25 Max.	5
Condition of Copper Rod (CM color)	5 Max.	3
Condition of Steel Rod (CM color)	5 Max.	2

Turbine Oil Demulsibility

ASTM D-1401	
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(130° F.) ml: oil – water – cuff (minutes)	40 – 40 – 0 (30)
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Denison Filterability

1.2 Micron Filter	<u>HF - 0</u>	
A No Water, S	600 Max.	150
B 2% Water, S	2 x A Max.	165