



OUR BUSINESS IS HEAVY DUTY LUBRICANTS

Tel: (305)681-6110 Fax: (305)681-0906 / Miami, FL 33167 www.PETRO-FLORIDA.com

PRODUCT SPECIFICATIONS & TECHNICAL DATA

ANTI-WEAR T.I.P. HYDRAULIC OILS

PETROFLO ANTI-WEAR T.I.P. HYDRAULIC OILS are formulated using highest quality, virgin mid-continent base stock. Especially refined for hydraulic application, they are extremely stable. The blended base oils are then treated with select, anti-wear additives containing Zinc Dithiophosphate, in addition to anti-rust, anti-oxidation, anti-foam and other additives that are listed below. Every **PETROFLO ANTI-WEAR T.I.P. HYDRAULIC OILS** manufacturer is carefully compounded to very rigid quality control standards to provide your hydraulic machinery with the best possible protection.

MEETS OR EXCEEDS SPECIFICATION REQUIREMENT OF:

- | | |
|-----------------------------|----------------------------|
| * VICKERS I-286-S, M-2950 S | * DENISON HF-1, HF-2, HF-0 |
| * RACINE VARIABLE | * CINCINNATI MILACRON |
| * VOLUME VANE PUMPS | * P-68, P-69, P-70 |
| * DIN 51524, PART 2 | * LEE-NORSE 100-1 |
| * JEFFREY N O.: 87 | * FORD M-6C32 |
| * U.S. STEEL 136, 127 | * B.F. GOODRICH 0152 |
| * COMMERCIAL HYRAULICS | * GENERAL MOTORS |
| * AFNORE 48-603 | *LH-04-1, LH-06-1, LH-15-1 |

PROPERTIES AND BENEFITS:

ANTI-WEAR ADDTIVES: The special use of anti-wear agents containing Zinc Dithiophosphate plate and protect close tolerance hydraulic pumps and other hydraulic components against wear, scoring and seizing due to severe friction, heat and pressure stresses. Reduce vane pump wear as much as 98% over conventional hydraulic oils.

HIGH VISCOSITY INDEX: Maintains more uniform viscosity control of hydraulic oil medium with fluctuating temperature changes in the hydraulic system promoting a more stable transmission of hydraulic power, and smoother functioning of hydraulic controls. Minimizes loss of oil past seals and other clearances due to its exceptional resistance to thinning under heat.

OXIDATION RESISTANCE: The addition of special oxidation inhibitors enables **PETROFLO ANTI-WEAR T.I.P. HYDRAULIC OILS** to withstand the formation of acids, gums, sludge, varnish, and other harmful products of oxidation, thereby prolonging the life of the hydraulic oil and keeping the hydraulic system clean and functioning efficiently.

RUST PREVENTATIVE AND ANTI-CORROSIVE AGENTS: These special protective agents coat the highly polished parts of the hydraulic system against the harmful effects of rust and corrosion caused by water, acids and other contributing substances that act as catalysts.

EXTREME PRESSURE AGENTS: The important value of these agents impart greater film strength to **PETROFLO ANTI-WEAR T.I.P. HYDRAULIC OILS**, enabling them to withstand greater shock loads from unusual surges of pressure, thereby prolonging the life of critical hydraulic components.

ANTI-FOAM AGENTS: These agents are designed to eliminate foam due to air becoming entrained in system thereby avoiding pump cavitation an erratic hydraulic performance.



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DEMULSIBILITY ADDITIVES: Promote the rapid separation of water from hydraulic oil, causing the water to settle on tank bottom for easy drainage. Prevent formation of harmful emulsions and slimy deposits. Prolongs life of oil and insure superior maintenance of equipment.

SUPERIOR LUBRICITY AND HIGH FILM STRENGTH: A special oiliness quality promotes more efficient fluid power by lowering the coefficient of friction.

SEAL CONDITIONER: Maintains elasticity of seals thereby controlling oil leaks and minimizing loss of hydraulic pressure.

APPLICATIONS: **PETROFLO ANTI-WEAR T.I.P. HYDRAULIC OILS** are used in hydraulic systems ranging from moderate to severe high pressure operating conditions. They are found in injection molding machinery, plastic processing equipment, compacting and bailing machines, fork lift trucks, metal working machine tools, construction equipment, sanitation vehicles, hydraulic elevators and other specially designed hydraulic power equipment.

TYPICAL ANALYSIS PETROFLO T.I.P, 100-15-7 HYDRAULIC OILS

<u>CHARACTERISTICS</u>	<u>ASTM STANDARDS</u>	<u>T.I.P 100-15-7</u>	<u>T.I.P 100-20-7</u>	<u>T.I.P 100-30-7</u>
ISO GRADE		32	46	68
API GRAVITY	D 287	30.4	28.4	27.5
VISCOSITY SUS @ 210 F.	D 88	44	49	55.0
VISCOSITY SUS @ 100 F.	D 88	165	238	340
VISCOSITY Cst 40 ©	D	32	46	68
VISCOSITY Cst 100 ©	D	5.3	6.7	8.5
VISCOSITY INDEX	D 567	105	105	105
FLASH COC F.	D 92	395	395	400
POUR POINT	D 97	-35	-20	-17
ANTI-WEAR PROPERTIES ZDP	D 811	SUPERIOR	SUPERIOR	SUPERIOR
OXIDATION ENDURANE HRS.	D 943	5000 +	5000 +	5000 +
RUST & CORROSION	D 665	NO RUST	NO RUST	NO RUST
DEMULSIBILITY	D 1401	RAPID	RAPID	RAPID
ANTI-FOAM ACTION	D 892	EXCELLENT	EXCELLENT	EXCELLENT
EXTREME PRESSURE	4 BALL TEST	SUPERIOR	SUPERIOR	SUPERIOR
ZINC PPM	D	833	833	833

The above analyses are typical inspections only and the finished product may vary from batch to batch