



TEXACO RANDO[®] HD

22, 32, 46, 68, 100, 150, 220

CUSTOMER BENEFITS

Texaco Rando HD oils deliver value through:

- **Longer equipment life** — Special antiwear additive package reduces wear by protecting surfaces when load causes breakdown of the lubricant film.
- **Reduced downtime** — Effective rust and oxidation inhibitor system prevents the production of abrasive particles from rust formation, and deposits, varnishes and sludges from oil breakdown, which can damage equipment surfaces and seals, and block filters prematurely.
- **Trouble-free operation** — Good hydrolytic stability and water separation characteristics provide excellent filterability in the presence of water contamination. Good anti-foam and air release properties ensure smooth operation and system efficiency.
- **Extended oil service life** — High oxidation stability resists oil thickening and deposit formation in service, eliminating the need for unscheduled change of hydraulic fluid.

FEATURES

Texaco Rando HD **ISO 32, 46, and 68** are designed to give maximum hydraulic pump protection in mobile and stationary systems.

Texaco Rando HD **ISO 100, 150, and 200** are designed for all types of lubricant applications where a premium antiwear lubricant in their ISO viscosity grade is required, such as an AGMA Gear Lubricant or general machinery lubrication.

Texaco Rando HD oils provide excellent:

- antiwear protection
- oxidation and corrosion inhibition
- foam and aeration suppression

Under moderate loads and temperatures, the high viscosity index of Texaco Rando HD oils assures good film strength between metal surfaces and is further enhanced by antiwear additive protection.

APPLICATIONS

Texaco Rando HD **ISO 32, 46, or 68** are recommended for:

- vane-, piston-, or gear-type pumps, especially where pressures exceed 1000 psi
- lightly loaded reciprocating compressors
- motors and bearings

Texaco Rando HD **ISO 100, 150, or 220** are recommended for:

- hydraulic equipment reduction gears
- reciprocating air compressors
- plain and antifriction bearings
- circulating oil systems

Texaco Rando HD oils meet the requirements of:

- **Vickers** I-286-S, M-2950-S, 35VQ-25 (ISO 32, 46, 68)
- **Cincinnati Machine** P-68 (ISO 32), P-70 (ISO 46), P-69 (ISO 68)
- **Denison** HF-0/T6C, HF-2 (ISO 32, 46, 68)
- ANSI/AGMA 9005-D94, *Industrial Gear Lubrication*, for gear lubrication as rust and oxidation inhibited gear oils (ISO 46, 68, 100, 150, 220)
- (discontinued in 1998) of the **U.S. Department of Agriculture (USDA)** for use in federally inspected meat and poultry plants as H2 lubricants with no food contact.

Do not use in high pressure systems in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

TYPICAL TEST DATA

	22	32	46	68	100	150	220
<i>CPS Number</i>	221655	221657	221658	221659	222778	221660	221661
<i>MSDS Number</i>	8643	8643	8643	8643	12195	12195	12195
AGMA Grade	—	—	1	2	3	4	5
API Gravity	33.7	32.6	31.8	31.6	30.1	29.7	28.5
Viscosity, Kinematic cSt at 40°C cSt at 100°C	23.1 4.4	30.4 5.2	43.7 6.5	64.6 8.4	95.0 11.0	143 14.2	209 18.2
Viscosity, Saybolt SUS at 100°F SUS at 210°F	120 41	157 44	225 48	334 54	495 64	751 76	1105 93
Viscosity Index	98	99	97	98	100	97	96
Flash Point, °C(°F)	177(351)	220(428)	226(439)	235(455)	250(482)	260(500)	271(520)
Pour Point, °C(°F)	-36(-33)	-33(-27)	-30(-22)	-30(-22)	-15(+5)	-12(+10)	-12(+10)
Oxidation Stability Hours to 2.0 mg KOH/g acid number, ASTM D 943	>6000	>6000	>6000	>6000	>2000	>1500	>1000

Typical test data are average values only. Minor variations which do not affect product performance are to be expected in normal manufacturing.