



D & E

D & E oils are blended from high viscosity index (VI) pure paraffinic base stocks and contain very effective oxidation and corrosion inhibitors. These oils have very low carbon-forming tendencies and are very stable. They have good demulsibility characteristics and separate rapidly from water, which is important in turbine applications. They also show good air-release properties and excellent foam resistance.

Features

D & E oils meet or exceed the specifications of the major turbine manufacturers and satisfies the following:

- Canadian Gov't Standard 3-GP-357Mb
- NATO O-240
- British DEF-STAN 91-25
- High viscosity
- Effective oxidation & corrosion inhibitor additives
- Separates readily from water
- Safe for delicate silver plated components
- 1 year service life (32SP)

Benefits

- Prevents corrosion
- Resists foaming
- Resists oxidation — ensures long oil life
- Wide operating temperature range
- Excellent low-temperature fluidity

D & E oils are recommended for use in light duty (no EP) reduction gears and circulating oil systems. They can be used as a hydraulic fluid where oil pressures are less than 1000 psi and where the presence of silver-plated parts makes the use of antiwear-containing oils inadvisable. They can also be used in such equipment as machine tools, presses and lifts, and as a lubricant for various pumps and motors, plain and anti-friction bearings where no antiwear performance is required. They are also excellent lubricating oils for certain rotary type air compressors and for airline oilers in pneumatic systems.

Light grades of **D & E** meet the specifications of the major turbine manufacturers for turbine oils in direct-drive, land-installed turbines and for gas turbine lubrication. **D&E 77** satisfies the requirements of Canadian Government Standard 3-GP-357Mb for steam turbines and associated reduction gearing aboard naval vessels. It also satisfies the similar NATO O-240 and the British DEF-STAN 91-25 standards for such oils. Heavier grades of **D&E**, such as **220** and **320**, are excellent lubricants for the dryer bearing lubrication systems of paper machines where filters as fine as 3 microns are sometimes used to ensure system cleanliness.

D&E 32SP is a version of **D&E 32** that has been specially treated to provide turbine systems with protection from corrosion for up to a year during stand-by operation and shutdowns. This corrosion protection works in the vapour phase and is released from the oil to coat metal surfaces that are not submerged in the oil. **D&E 32SP** is a very effective product that can help avoid costly and time-consuming clean-out, flushing or repair procedures. It will provide broad-range protection against corrosion for ferrous and non-ferrous metals, including zinc, aluminum, copper, brass, Babbitt, silver and cadmium. It does not contain hazardous chromates, nitrites or phosphates.



Typical Performance Results

ISO GRADE	10	22	32	46	68	77	86	100	150	220	320	460
AGMA GRADE				1	2			3	4	5	6	7
VISCOSITY (D-445)												
cSt @ 40°C	9.8	22.0	32.5	46.3	68.4	76.8	85.8	100.2	150.6	220	320	456
cSt @ 100°C	2.6	4.3	5.4	6.8	8.7	9.4	10.2	11.3	14.6	18.8	24.1	30.6
VISCOSITY INDEX (D-2270)	103	100	99	100	98	98	100	98	95	95	96	97
POUR POINT (°C) (D-97)	-45	-31	-27	-23	-19	-19	-19	-17	-14	-10	-7	-6
FLASH POINT (°C) (D-92)	274	235	238	250	255	265	265	260	295	294	295	322
OXIDATION LIFE (HRS) (D-943)	2500+ ALL GRADES											
RPVOT (HRS) (D-2272)			663	635	649							
STRONG ACID No. (D-974) mg KOH/gm	NIL ALL GRADES											
T.A.N. (D-974)	.22	.10	.10	.11	.11	.10	.10	.10	.12	.12	.15	.15
DENSITY (KG/L) @ 15°C	0.849	0.866	0.871	0.874	0.877	0.878	0.879	0.880	0.884	0.888	0.892	0.895
API GRAVITY @ 15.6°C	35.0	31.9	30.9	30.2	29.7	29.5	29.3	28.6	28.4	28.0	27.7	26.9
DEMULSIBILITY (54.6°C)(D-1401)												
OIL	40	40	40	40	40	40	40	40	40	40	40	40
WATER	40	40	40	40	40	40	40	40	40	40	40	40
EMULSION (MIN.)	0(5)	0(5)	0(10)	0(5)	0(5)	0(10)	0(10)	0(10)	0(10)	0(10)	0(10)	0(15)
FOAM SEQ. I, III, III (D-892)	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
GAS BUBBLE SEP. (D-3427) @ 50 Mins.		1.1										
INTERF'L TENSION Mn/m (D-971)						17.5						
COPPER CORR. (D-130) 3 HRS. @ 100°C			1A	1A	1A	1A						
RUST PROTECTION (D-665) (SEQ A & B)			PASS	PASS	PASS							
S. ASH % wt. (D-874)						0.003						
ANILINE PT. (°C) (D-611)		22										

Available Package Sizes

D&E 10

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 1000 L (264 US gal.) Cube
- Bulk

D&E 22

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 1000 L (264 US gal.) Cube
- 500 L (132 US gal.) Cube
- Bulk

D&E 32

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- 1000 L (264 US gal.) Cube
- Bulk

D&E 32SP

- 20 L (5.28 US gal.) Pail
- Bulk

D&E 46

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- 1000 L (264 US gal.) Cube
- Bulk

D&E 68

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- 1000 L (264 US gal.) Cube
- Bulk

D&E 77

- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- 1000 L (264 US gal.) Cube
- Bulk

D&E 100

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- 1000 L (264 US gal.) Cube
- Bulk

D&E 150

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- Bulk

D&E 220

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- Bulk

D&E 320

- 20 L (5.28 US gal.) Pail
- 210 L (55.5 US gal.) Drum
- 500 L (132 US gal.) Cube
- Bulk

D&E 460

- 210 L (55.5 US gal.) Drum
- Bulk

