



Monolec® EP Turbine Oil (6476)

Premium R & O Oil Protects Mainline Turbines

Monolec® EP Turbine Oil (6476) is a premium anti-wear R & O oil designed specifically for use in mainline steam and gas turbine generators driven with or without reduction gears. It is an excellent lubricant for gears, bearings and governor-controlled mechanisms. Monolec EP Turbine Oil is formulated with high-quality base oil and additives to provide maximum rust and oxidation resistance. It also contains anti-foaming and water separation additives as well as Monolec, LE's exclusive wear-reducing additive.

Beneficial Qualities

Wear Resistance

- Has high film strength to protect moving parts
- Controls corrosive and scuffing wear, assuring longer life for bearings and rubbing surfaces

Rust & Oxidation Resistance

- Provides exceptional R & O protection
- Is completely noncorrosive to turbine parts

High Performance

- Has a naturally high viscosity index
- Separates rapidly from water
- Suppresses foam
- Prevents sludging during service
- Provides long service life for oil and equipment
 - o Reduces downtime
 - o Reduces labor & lubricant costs



Proprietary Additive

LE's proprietary additives are used exclusively in LE lubricants. Monolec EP Turbine Oil (6476) contains Monolec.

Monolec® wear-reducing additive creates a single molecular lubricating film on metal surfaces, vastly increasing oil film strength without affecting clearances. An invaluable component in LE's engine oils, industrial oils and many of its other lubricants, Monolec allows opposing surfaces to slide by one another, greatly reducing friction, heat and wear.



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Performance Requirements Met or Exceeded

- AAMA 51524 Part 1
- ALSTOM/ABB HTGD 90117
- ASTM D 4304
- AFNOR NF 48-603 Part 1 HR, Part 2 HH and HL
- British Standard BS 489
- Brown Boverie HTGD 90117
- Civil Works CS-15487
- Denison HF-1
- DIN 51524 Part 1
- General Electric GEK 28143A, 32568E, 46506D, 101941A
- General Motors GM LS-2
- Japanese Industrial Standard K 2213 type 2
- MILITARY MIL-L-17672D, MIL-L-17331H
- Siemens TLV 9013 04
- Solar Turbines ES9-224
- Westinghouse M-spec 55125Z3
- USDA H2

Typical Applications

- Mainline steam turbine generators
- Gas turbine generators
- Circulating oil systems
- Centrifugal compressors
- Other long service-life applications

	6476
Color	Amber
ISO VG / SAE Grade	32
Relative Density @ 60°F/60°F, ASTM D1298	0.864
Viscosity @ 100°C, cSt, ASTM D445	5.9
Viscosity @ 40°C, cSt, ASTM D445	34.7
Viscosity Index ASTM D2270	100
Flash Point °C (°F), (COC), ASTM D92	215 (419)
Pour Point °C (°F), ASTM D97	-39 (-38)
Rust Test 4 hrs @ 60°C, Sea H2O, ASTM D665B	Pass
Copper Corrosion 3 hrs @ 100°C, ASTM D130	1b
Oxidation by RPVOT @ 150°C, minutes, ASTM D2272	1,518
Four-Ball Wear @ 75°C, 1,200 rpm, 40 kgf, 60 minutes, mm wear, ASTM D4172	0.40
Ash—Sulfated %, ASTM D874	0.05
Acid Number mg KOH/g, ASTM D664	0.13
Base Number ASTM D2896	0.31
Emulsion Characteristics @ 54°C, oil-water-emulsion/minutes, ASTM D1401	40-40-0/10
Foaming Characteristics @ 24°C/93.5°C/24°C, 3 sequences, ml of foam/time to break, ASTM D892	0/0; 0/0; 0/0
Air Release ASTM D3427	
9.0-90.0 cSt @ 40°C: 50°C, minutes	<4.00

