

Product Information



Monolec® Two-Cycle Engine Oil (8104)

Heavy Duty Formula Promotes Optimal Engine Performance

Monolec Two-Cycle Engine Oil (8104) is a heavy duty oil specifically formulated to provide outstanding lubrication for all two-cycle engines, allowing them to run smoother, cooler and more efficiently. Recommended applications include chainsaws, lawn mowers, portable generators, outboard motors, and similar two-cycle applications. It contains premium base oil for greater film strength, better lubricity and higher natural viscosity index than competitive products, and contains LE's exclusive Monolec® additive for superior wear protection. This special formulation mixes easily with all types of gasoline and ensures optimal engine performance.



In two-cycle engines, lubrication is achieved by mixing the lubricant with the fuel, and using the fuel coming into the carburetor as a carrier for the oil. Lubrication of the entire engine must be accomplished in a single pass through the system. The fuel/oil/air mixture passes from the carburetor into the combustion chamber in a split second, where high temperatures instantly vaporize the gasoline. The oil, in droplet form, must lubricate all moving parts of the crankshaft, plus the piston and cylinder. If combustion of the oil is incomplete, or byproducts are deposited in the cylinder, serious problems can develop.

Beneficial Qualities

Enhances Engine Performance

- Enables faster starting
- Promotes instantaneous mixing of oil and fuel, even at low temps
- Has excellent low-temp fluidity
- Improves overall performance

Reduces Maintenance & Extends Life of Parts

- Greatly reduces friction and wear
- Prevents internal rust even when engines are idle
- Protects and extends the life of crankshaft bearings better than ordinary oils

- Minimizes spark plug fouling; port clogging; ring deposits and sticking; piston scuffing and burning; and combustion chamber deposits

Is Easy, Versatile & Environmentally Friendly

- Mixes easily with all gasolines
- Pre-diluted to facilitate mixing at low temps
- Suitable for premix and injection systems
- Can be used where either SAE 30 or 40 oil is specified
- Burns cleanly, reducing air and water pollution
- Uses red dye to help identify when fuel has been treated

Proprietary Additives

LE's proprietary additives are used exclusively in LE lubricants. Monolec Two-Cycle Engine Oil 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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8104

Color	Red
SAE Grade (base fluid)	40*
Relative Density @ 60°F/60°F , ASTM D1298	0.879
Viscosity @ 100°C , cSt, ASTM D445 (base fluid)	13.70
Viscosity @ 40°C , cSt, ASTM D445 (base fluid)	142.7
Viscosity @ 40°C , cSt, ASTM D445 (finished product)	40.00
Viscosity Index ASTM D2270 (base fluid)	90
Flash Point °C (°F) , (COC), ASTM D92	96 (205)
Pour Point °C (°F) , ASTM D97	-30 (-22)
Ash—Sulfated % , ASTM D874	0.10
Acid Number mg KOH/g, ASTM D664	0.60
Base Number ASTM D4739	1.50

*Technically, Monolec Two-Cycle Engine Oil is an SAE 40 oil, but its low pour point and excellent low-temperature fluidity mean it can be used where either an SAE 30 or 40 oil is recommended.

Performance Requirements Met or Exceeded

- API TC

Typical Applications

- Chainsaws
- Motorcycles
- Outboard Motors (under 50 hp)
- Portable Generators
- Pumps
- Snowmobiles (air-cooled engines)
- Any other two-cycle gasoline engines

Recommendations

- Contains petroleum distillates. Store away from heat or open flame.
- Use according to engine manufacturers' recommended oil/gasoline mixing ratios.
- Suitable for pre-mix and injection systems

