

TECHNICAL DATA SHEET

ECO MATIC Gear Oil EP-90 GL-4*Extreme Pressure Gear Lubricant for Manual Transmissions & Axles*

API GL-4

PRODUCT DESCRIPTION

ECO MATIC Gear Oil EP-90 GL-4 is a premium gear lubricant formulated with extreme-pressure additive technology, meeting API GL-4 performance specifications. Designed for manual transmissions, transaxles, and axles operating under moderate-to-severe service conditions, it provides excellent load-carrying capacity, superior anti-wear protection, and reliable gear surface protection across a wide temperature range. API GL-4 is the standard specification for most motorcycle gearboxes, agricultural equipment, and passenger car manual transmissions.

APPLICATIONS

- Manual transmissions and gearboxes in motorcycles and passenger cars requiring API GL-4
- Agricultural tractor gearboxes and PTO applications
- Synchromesh manual transmissions where API GL-5 is too aggressive
- Axles and differentials of light commercial vehicles
- Industrial gearboxes operating under moderate-to-high load conditions
- Available in 1L, 4L, 20L, and 200L pack sizes

PERFORMANCE STANDARDS

API GL-4 • MIL-L-2105

FEATURES & BENEFITS

- Meets API GL-4 — ideal for manual transmissions and synchromesh gearboxes
- Excellent extreme-pressure (EP) load-carrying capacity for gear surface protection
- Superior anti-wear performance extends gear and bearing service life
- Good thermal stability for consistent performance across operating temperatures
- Excellent copper and copper alloy compatibility — safe for synchromesh components
- Good oxidation resistance for long in-service life
- Smooth gear shifting due to controlled friction characteristics

TYPICAL PROPERTIES

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Appearance	Visual	Clear, Amber Liquid
SAE Viscosity Grade	—	90
API Service Classification	—	GL-4
Kinematic Viscosity @ 40°C (cSt)	ASTM D445	125
Kinematic Viscosity @ 100°C (cSt)	ASTM D445	14.5
Viscosity Index	ASTM D2270	105 min
Flash Point, COC (°C)	ASTM D92	190 min
Pour Point (°C)	ASTM D97	-18 max
Density @ 15°C (kg/L)	ASTM D4052	0.890
Four Ball Weld Load (kg)	ASTM D2596	250 min
Four Ball Wear Scar Diameter (mm)	ASTM D2266	0.6 max

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Copper Corrosion @ 100°C, 3 hrs	ASTM D130	3 max
Foam Tendency/Stability @ 24°C (ml/ml)	ASTM D892	300/0 max

STORAGE & HANDLING

Store the product indoors and avoid direct sunlight or heat. Keep containers tightly closed when not in use. Avoid contact with skin and eyes. After skin contact, wash thoroughly with soap and water. Keep out of reach of children.

DISCLAIMER: The information provided in this Technical Data Sheet is based on standard laboratory tests and is indicative only. Synergy Lubricant and Chemical makes no warranty regarding the accuracy of this data. Typical values may vary within acceptable production tolerances.

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