

## Puma Gear Oil EP 80W-90

### Heavy Duty Gears & Final Drives

Puma Gear Oil EP 80W-90 is an EP (Extreme Pressure) gear oil for very highly loaded gears. It can also be used in automotive applications including heavy duty axles, conventional gear-boxes and steering-boxes on cars and trucks, gear-boxes, final drives, power take-offs on farm and earth-moving machinery where API GL-5 is required.

- ✓ Anti-wear Protection
- ✓ Oxidation Resistance
- ✓ Anti-foam Performance
- ✓ Extreme Pressure

### Designed to Perform

#### Anti-wear Protection – Longer Equipment Life

Proven anti-wear additive packages provide greater resistance to sliding wear thus ensuring efficiency and long life of all moving parts of final drive, transmissions systems. It contains special additives which ensure a strong oil film is formed and maintained even under high load conditions that occur with hypoid gears which are used in many automotive axles.

#### Oxidation Resistance - Longer Oil Life

It has extremely good oil life and lubricant stability even when subjected to unusually high thermal stresses and chemical break down; this property minimises sludge and deposit formation. Maintenance costs are therefore reduced and the useful service life of the oil is extended.

#### Non-corrosiveness

Will not corrode materials employed for the construction of machinery and especially those used for gaskets and seals, as well as metals such as steel, cast iron, copper and bronze.

#### Toxicity

The product is non-toxic since it contains no lead compounds; it can thus be used in oil-mist lubrication systems.

#### Anti-corrosion & Anti-rust Properties

These inhibit the oxidation of internal surfaces of industrial gear systems and therefore prevent operating difficulties and breakdown of the oil caused by metallic oxides that would otherwise form within the machinery.

#### Anti-foam Performance

It has anti-foam qualities which minimise the formation of air bubbles which could adversely affect lubricant film continuity and hence cause wear.

#### Frictional Performance

Highly consistent and reliable friction performance when used with the advanced metallic and non-metallic materials found in modern systems. Minimal clutch slippage, smooth and quiet brake operation, and trouble-free transmission operation.

#### Compatibility & Miscibility

Puma Gear Oils are compatible with various seal materials to help prevent premature failure of seals and thus avoid leakage.

#### Applications

Puma Gear Oil EP is recommended for the lubrication of differentials in passenger cars, trucks, buses and agricultural equipment working under severe operating conditions (heat or cold) and requiring an API GL-5.

Its high performance characteristics make this lubricant a reliable and versatile lubricant for the majority of operating conditions for differentials.

#### Puma Gear Oil EP 80W-90

Meets the requirements of the following specifications:

- > API : GL-5
- > MT1
- > MIL-PRF-2105E
- > Mack GO-J
- > SAE J2360

### Typical Physical Characteristics

Property	Temp	Units	Test Methods	SAE 80W-90
Viscosity Grade	-	-	J306	80W-90
Kinematic Viscosity	@ 40°C	cSt	ASTM D7279	169.1
Kinematic Viscosity	@ 100°C	cSt	ASTM D7279	16.1
Low Temp Viscosity	-	mPas	ASTM D2983	150000
Viscosity Index	-	-	ASTM D2270	105
Flash Point (COC)	-	°C	ASTM D92	223
Pour Point	-	°C	ASTM D97	-33
Density	@ 20°C	g/mL	ASTM D4052	0.8825
Foam Sequence 111	-	mL	ASTM D892	0/0, 0/0, 0/0
Phosphorous	-	% Weight	ASTM D4951	0.438

*These characteristics are typical of current product methods whilst future production will conform to Puma Lubricants specifications, variations in these physical characteristics may occur.*

### Health & Safety Environment

- > This product is unlikely to present any significant health and safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.
- > Avoid contact with eyes and skin, use proper impervious gloves with used oil. After skin contact, wash immediately with soap and water. Guidance on health and safety is available on the appropriate Safety Data Sheet (SDS) which can be obtained from [sds.pumaenergy.com.au](https://sds.pumaenergy.com.au)

### Protect the Environment

- > Take used oil to an authorised collection point. Do not discharge used or new oil into drains, soil or water.

### Additional Information

- > Technical advice may be obtained from your Puma Energy Representative.