



ROYAL 1® 80W-90, 85W-140 Gear Oil

TECHNICAL PRODUCT INFORMATION

ROYAL 1® 80W-90, 85W-140 Gear Oil

ROYAL 1 80W-90 and 85W-140 are high performance, heavy duty gear lubricants formulated from high performance base oils and an advanced additive system. These lubricants are engineered for automotive applications including heavy duty axles and final drives where extreme pressures and shock loading are expected. They are recommended by ROYAL 1 for applications where API GL-5 service is required.

FEATURES/ BENEFITS

Today's heavy equipment applications place higher performance demands on drive train lubricants. Higher speeds, higher torque, and heavier loads require improved formulations to maximise equipment life and optimise operating costs. Longer service intervals place additional demands on the gear lubricant requiring effective basestock and additive systems. ROYAL 1 gear lubricants are engineered to meet these challenges. The key benefits include:

ROYAL 1® 80W-90, 85W-140 Gear Oil	
Features	Advantages and Potential Benefits
Exceptional thermal stability and resistance to high temperature oxidation	Extended gear and bearing life due to minimal deposits Longer seal life
Outstanding protection against low speed/high torque wear and against high speed scoring	Increased load carrying capability Reduced maintenance costs and longer equipment life
Excellent rust and corrosion protection	Reduced wear and longer component life
Effective low temperature lubrication	Improved startability
Compatible with typical automotive seals and gaskets	Minimum leakage and reduced contamination



APPLICATIONS

Recommended by ROYAL 1, for use in:

- Heavy duty axles and final drives requiring API GL-5 level performance
- Passenger cars, on highway light and heavy duty trucks and commercial vehicles
- Off highway industries including: construction, mining, quarrying, and agriculture
- Other heavy duty industrial and automotive applications involving hypoid gears operating under conditions where high speed/shock load, high speed/low torque, and/or low speed/high torque prevail

TYPICAL PROPERTIES

ROYAL 1® 80W-90, 85W-140 Gear Oil		
ROYAL 1 Properties	80W-90	85W-140
SAE Grade	80W-90	85W-140
Viscosity, ASTM D 445	80W-90	85W-140
cSt @ 40°C	136	328
cSt @ 100°C	14.5	25.3
Viscosity Index, ASTM D 2270	105	97
Pour Point, °C, ASTM D 97	-30	-18
Flash Point, °C, ASTM D 92	202	224
Density @ 15°C kg/l, ASTM D 4052	0.9	0.91

HEALTH AND SAFETY SN PLUS

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.