



PRODUCT DATA SHEET

GEAR OILS 80W90 AND 85W140

PRODUCT DESCRIPTION

Gear Oils 80W90 and 85W140 are superior API GL-5 Gear Oils designed to provide:

- Excellent Thermal Stability
- Much Improved Oil Seal Life
- Much Improved Durability (Gear Surface Life)
- Much Improved Corrosion Protection to Yellow Metals under both wet and dry conditions.

Gear Oils 80W90 and 85W140 are specified irrespective of service severity, for the lubrication of car, truck and tractor differentials and other final drives, transfer and steering gearboxes and manual transmissions. Special oxidation resistant paraffinic base oils combined with high performance extreme pressure (EP) additives are formulated in **Gear Oils 80W90 and 85W140** to ensure long service life to transmission drive lines.

BENEFITS

Gear Oils 80W90 and 85W140 avoid lubricant related high temperature degradation problems of "cooked" transmission synchronisers and reduced oil flow to gear and bearings (due to obstructed oil passageways or filters) so that costly transmission failures associated with lubricant failure do not occur. They provide excellent long term protection against pitting fatigue – a life limiting variable of a gear set. OEM's recognise that lubricant protection against pitting is a very important design variable for long transmission life. Field tests, laboratory spalling and power divider snap tests confirm **Gear Oils 80W90 and 85W140** ability to give long durability to gear sets.

Corrosion protection is afforded by **Gear Oils 80W90 and 85W140** to copper alloys under both wet and dry conditions. There is no corrosion causing interaction between these metals and the special EP additives incorporated in **Gear Oils 80W90 and 85W140**, as may occur with other commercially available EP additives. The 'stay-on' properties of these high film strength lubricants effectively quieten transmission drive line noise tendencies under all conditions of low speed high torque, high speed low torque and shock loading. **Gear Oils 80W90 and 85W140** avoid the natural development of foam in transmission service.

CHARACTERISTICS

Gear Oils 80W90 and 85W140 provide protection against the formation of sludge, oxidation and carbonaceous deposit build-up and excessive viscosity increases, thereby ensuring long service life of transmission components. Thermal stresses on Gear Oils in modern high performance transmissions have increased due to the following:

- Change in vehicle aerodynamics
- Wider use of drive-line retarders
- Increased "Power Density" for transmission and rear axles
- Extended slow speeds and high loads
- Higher ambient temperatures
- Higher horse-power
- Extended warranties/reduced maintenance etc.

Excessive heat build up can occur (up to 180°C), resulting in oil degradation and increased friction and wear.

