

# Shell Spirax AX

## High performance long life axle oils



Spirax AX are long life axle oils designed to give new benefits based on improved levels of performance to meet the future requirements of drivelines. Specially optimised mineral base oils and new additive technology improve lubrication of the drive train and potentially extend oil drain intervals.

### Applications

- **Automotive drivelines**  
Heavily loaded axles and some non-synchronised transmissions where an API GL-5 performance level fluid or better is required.

### Performance Features and Benefits

- **Longer oil drain capability**  
Higher reserves of additives ensure long-term protection of gears. Longer oil life, as a result of higher oxidation stability and lower running temperatures, also leads to extended oil drain intervals.
- **Longer gear life**  
Clear improvements in protection against wear prevent premature failure. High oxidation resistance also prevents damaging deposit formation in axles.
- **Greater efficiency**  
Optimised friction properties have led to significant reductions in power loss and peak temperatures. Ideal shear-stable formulation with improved flow properties at low temperatures enhances efficiency.

- **Less environmental pollution**  
Reduced environmental pollution and improved recyclability result from the significantly lower chlorine content. Markedly improved seal compatibility increases protection against leaks.

### Specification and Approvals

API Service Classification	GL-5
US Military	MIL-L-2105D
Mercedes-Benz Sheet *	235.6
MAN	342 Typ M2
ZF TE-ML	05A, 07A, 16C*/D**, 17B*, 19B*, 21A

\* only for the SAE 80W-90 grade \*\* only for the SAE 85W-140 grade

### Advice

Advice on applications not covered in this leaflet may be obtained from your Shell Representative.

### Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.

### Protect the environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

### Typical Physical Characteristics

Spirax AX		80W-90	85W-140
SAE Viscosity grade	SAE J 306	80W-90	85W-140
Kinematic Viscosity	ISO 3104		
at 40°C mm <sup>2</sup> /s		169.0	435
at 100°C mm <sup>2</sup> /s		16.8	29.6
Density at 15°C kg/m <sup>3</sup>	ISO 12185	900	910
Flash Point COC °C	ISO 2592	220	225
Pour Point °C	ISO 3016	-30	-15

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.