



Formerly Known As: Shell Spirax GX 80W-90

# Shell Spirax S3 G 80W-90

High Performance Manual Transmission and Gear Oil for MAN, ZF and other OEMs

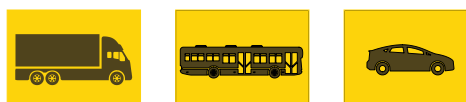
Shell Spirax S3 G 80W-90 are long life gearbox oils designed to give new benefits based on improved levels of performance to meet the future requirements of gearboxes. Specially optimised mineral base oils and new additive technology improve lubrication of the drive train and potentially extend oil drain intervals.

## DESIGNED TO MEET CHALLENGES

### Performance, Features & Benefits

- Longer oil drain capability**  
 Higher reserves of additives ensure long-term protection of the gears. Longer oil life as a result of higher oxidation stability also improves oil drain intervals.
- Longer gear life**  
 Clear improvement in protection against wear prevents premature failure. High oxidation resistance also prevents damaging deposit formation in the gears.
- Greater efficiency**  
 Ideal shear-stable formulations give improved flow properties and shiftability at low temperatures. Optimised friction properties minimise power losses and wear, thereby also improving efficiency.
- Less environmental pollution**  
 Reduced environmental damage and improved recyclability result from the significantly lower chlorine content. Markedly improved seal compatibility for increased protection against leaks.

### Main Applications



- Automotive transmissions**  
 Synchronmesh gearboxes and medium loaded axle drives.

### Specifications, Approvals & Recommendations

- MAN : 341 Type Z2, 341 Type E2
- ZF TE-ML : 02B-016A-17A-19A
- Eaton (ex US) : meets
- Isuzu : meets
- API Service Classification : GL-4

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

### Typical Physical Characteristics

Properties			Method	Shell Spirax S3 G 80W-90
SAE Viscosity Grade			SAE J 306	80W-90
Kinematic Viscosity	@40°C	mm <sup>2</sup> /s	ISO 3104	160.5
Kinematic Viscosity	@100°C	mm <sup>2</sup> /s	ISO 3104	16.1
Viscosity Index			ISO 2909	105
Density	@15°C	kg/m <sup>3</sup>	ISO 12185	895
Flash Point (COC)			ISO 2592	215
Pour Point			ISO 3016	-30

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

## Health, Safety & Environment

- **Health and Safety**

Shell Spirax S3 G 80W-90 is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

- **Protect the Environment**

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

## Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.