Technical Data Sheet

Formerly Known As: **Shell Spirax MX 80W-90**

Shell **Spirax** ***S3 AM 80W-90***

High performance, GL-4/5 Universal Gear Oil for MAN, ZF, MACK and Scania

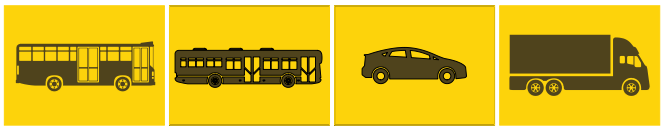
Shell Spirax S3 AM 80W-90 is a true universal driveline oil designed for use in modern heavy duty axles and gearboxes offering the convenience of one transmission oil for the whole driveline. Specially optimised mineral base oils and new additive technology improve lubrication of the drive train and potentially extend oil drain intervals. For e.g. MAN, ZF, MACK and Scania.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Universal gear oil formulation**
  The special formulation of Spirax S3 AM 80W-90 offers the convenience of one oil for both gearbox and axle application.
- **Longer oil drain capability**
  The advanced additive system in Spirax S3 AM 80W-90 has been recognised as being capable of extended oil drain intervals.
- **Longer gear life**
  Clear improvements in protection against wear helps prevent premature failures. High oxidation resistance also prevents damaging deposit formation in gearboxes & axles.
- **Low Chlorine formulation**
  Shell Spirax S3 AM 80W-90 uses a modern low chlorine formulation resulting in improved recyclability.

Main Applications



- **HD automotive transmissions and axles**
  Heavily loaded axle drives, synchronised and non-synchronised heavy duty gearboxes.
- **Universal driveline applications**
  Shell Spirax S3 AM 80W-90 has been developed to exceed the latest API oil specifications making it suitable for application in a wide range of heavy duty and passenger car applications.

Specifications, Approvals & Recommendations

- API Service Classification: GL-4, GL-5, MT-1
- MAN 341 Type E2, MAN 341 Type Z2, MAN 341 GA1, MAN 342 Type M2
- ZF TE-ML 02B, 05A, 12L, 12M, 16C, 17H, 19B, 21A
- Scania STO 1:1 G
- SAE J 2360 : Meets requirements
- Mack GO-J approved
- US Military MIL-PRF 2105E - Meets

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

Typical Physical Characteristics

Properties			Method	Shell Spirax S3 AM 80W-90
SAE Viscosity Grade			SAE J 306	80W-90
Kinematic Viscosity	@40°C	mm^2/s	ISO 3104	169
Kinematic Viscosity	@100°C	mm^2/s	ISO 3104	16.8
Viscosity Index			ISO 2909	106
Density	@15°C	kg/m^3	ISO 12185	900
Flash Point (COC)		°C	ISO 2592	220
Pour Point		°C	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 AM 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 Safety Data Sheet, which can be obtained from https://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.