

Formerly Known As: Shell Spirax AX Plus 80W-90

# Shell Spirax S3 AD 80W-90

# High performance, GL-5 axle oil for Mercedes Benz

Shell Spirax S3 AD 80W-90 is an extreme-pressure lubricant containing multi-functional additives which impart good anti-wear, oxidation stability and anti-rust characteristics. It is suitable for gear applications presenting load-speed conditions of extreme severity, such as medium and low speed spur or helical gear units, spiral-bevel and hypoid axle units as well as extended drain capabilities.

# **DESIGNED TO MEET CHALLENGES**

## Performance, Features & 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 helps prevent premature failure. High oxidation resistance also prevents damaging deposit formation in axles.

#### Comprehensive components

Specially selected additives impart good anti-wear especially at high operating temperature conditions, oxidation stability, anti-rust characteristics and yellow metal compatibility.

# **Main Applications**



# Typical Physical Characteristics

#### · Axles and differentials

A heavy duty, SAE 80W-90 axle oil blended to meet the stringent requirements of Mercedes Benz MB 235.20 and ZF for extended drain.

#### Specifications, Approvals & Recommendations

- MB-Approval 235.20
- MAN 342 Type M3
- MAN 341 Type GA1
- Scania STO 1:0
- ZF TE-ML 05A, 12L, 12M, 16B, 17B, 19B, 21A
- API Service Classification : GL-5, MT-1
- SAE J 2360 : Meets requirements

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

Properties			Method	Shell Spirax S3 AD
SAE Viscosity Grade				80W-90
Kinematic Viscosity	@40°C	mm²/s	ISO 3104	137
Kinematic Viscosity	@100°C	mm²/s	ISO 3104	14.4
Viscosity Index			ISO 2909	104
Density	@15ºC	kg/m <sup>3</sup>	ISO 12185	899
Flash Point (COC)		°C	ISO 2592	204
Pour Point		°C	ISO 3016	-33

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 AD 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 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.