Technical Data Sheet

Formerly Known As: **Shell Spirax A 90 LS**

Shell **Spirax** ***S2 ALS 90***

High quality, GL-5 axle oil for limited slip differentials

Spirax S2 ALS 90 oil is blended for use in a wide variety of automotive axle units with limited slip differentials.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Comprehensive components**

  Specially selected additives impart good anti-wear, anti-rust characteristics, oxidation and thermal stability as well as the required coefficient of friction to meet requirements of limited slip differentials.

- **High quality base oils**

  Maintains low temperature flow in the designed temperature range, resists oxidation, and maintains oil film between gears.

- **Automotive drivelines**

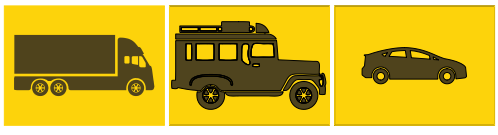
  Suitable for heavy duty vehicles, including construction machines or buses, and passenger cars which are fitted with limited slip differentials. May be used in other moderate to heavily loaded gear sets that will allow use of a friction modified, hypoid gear oil.

Specifications, Approvals & Recommendations

- API Service Classification GL-5 Limited Slip

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

Main Applications



Typical Physical Characteristics

Properties			Method	Shell Spirax S2 ALS 90
SAE Viscosity Grade			SAE J 306	90
Kinematic Viscosity	@40°C	mm^2/s	ISO 3104	155
Kinematic Viscosity	@100°C	mm^2/s	ISO 3104	15
Viscosity Index			ISO 2909	96
Density	@15°C	kg/m^3	ISO 12185	909
Flash Point (COC)		°C	ISO 2592	210
Pour Point		°C	ISO 3016	-18

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 S2 ALS 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.