Technical Data Sheet

- Maintenance Saving
- Enhanced Efficiency

Shell **Spirax** *S6 ATF A668*

Synthetic Extended Drain Heavy Duty Automatic Transmission Fluid

Shell Spirax S6 ATF A668 oil is a fully synthetic, heavy-duty automatic transmission fluid which is specifically designed and approved for use in transmissions requiring Allison TES-668 fluids. Spirax S6 ATF A668 is approved for extended service intervals and remains stable even under severe operating conditions.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long enhanced protection – long equipment life**

  Viscosity Control : Spirax S6 ATF A668 incorporates latest synthetic base fluid technology and mechanically stable viscosity index improver technology to help ensure the viscosity of the oil remains stable over the complete oil drain, thus helping to ensure consistent lubrication and oil film thickness required to ensure protection of the gears, bearings and other mechanical components.

- **Long fluid life – maintenance saving**

  The exceptional oxidation resistance of Spirax S6 ATF A668 helps resist formation of deposits to ensure longer fluid life and better fluid performance under arduous conditions.

- Extended fluid life demonstrated in full scale long duration transmission testing.

- **Enhanced efficiency**

  Extremely high frictional stability, excellent viscometric control and durability helps ensure consistent shifting and power transfer characteristics. This helps provide smooth shifting and helps maintain the fuel efficient operation of the transmissions.

- Excellent low temperature properties help ensure efficient transmission operation even under cold climate conditions.

- Excellent anti-foam and filterability characteristics to help ensure efficient and effective lubrication and hydraulic control system performance within the transmission.

Main Applications

- **Allison Medium/Heavy Duty Automatic Transmissions**

  Spirax S6 ATF A668 was developed to meet the extended drain requirements of late model medium and heavy duty Allison automatic transmissions. It is backward compatible with Allison-approved TES-295, TES-389 and TES-468 fluids – as recommended by Allison on their approved on-highway fluids list.

- Municipal fleets
- Vans, school buses
- Buses and Coaches
- Emergency vehicles
- Commercial vehicles and trucks
- Motor- homes
- Heavy duty pickup trucks
- Spirax S6 ATF A668 can also be used in some Voith heavy duty transmissions as well as those previously serviceable by Dexron® III and Mercon® fluids, and is particularly suited to mixed fleet operations.

Specifications, Approvals & Recommendations

Approved:

- Allison TES-668 (668-10222021)
- DTFR 13C190
- DANA-OHTM-ATF-X: 22A-0004
- Voith H55.6335.xx

Suitable for use in applications calling for:

- Volvo 97340/ 97341
- Ford Mercon
- GM DEX II/ IIIG/ IIIH
- JASO 1-A
- MAN 339 Type V1
- Caterpillar AT-1

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

Typical Physical Characteristics

Properties			Method	Shell Spirax S6 ATF A668
Density	@15°C	kg/m³	ASTM D4052	851
Pour Point		°C	ASTM D97	-51
Flash Point		°C minimum	ASTM D92	210
Kinematic Viscosity	@40°C	cSt	ASTM D445	34.3
Kinematic Viscosity	@100°C	cSt	ASTM D445	6.9

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**

  This product 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.