Technical Data Sheet

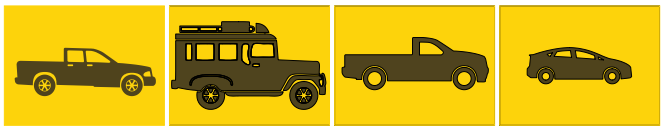
Shell **Spirax** *S5 ATF X*

Premium, Synthetic Technology Multi-Vehicle Automatic Transmission Fluid

Shell Spirax S5 ATF X is a premium performance, synthetic technology fluid designed to meet the needs of multiple vehicle types for service fill in automatic transmission service. Shell Spirax S5 ATF X meets the needs of many Asian and North American designed automatic transmissions.

DESIGNED TO MEET CHALLENGES

Main Applications



- Passenger car automatic transmissions
- Heavy duty automatic transmissions
- Power steering units
- Hydraulic systems requiring this grade of fluid

Performance, Features & Benefits

- **Friction modified**
  Provides consistent, reliable, smooth and trouble free operation of automotive transmission systems.
- **Exceptionally high oxidation resistance**
  Resistant to oil degradation and keeps automatic transmissions clean.
- **Excellent shear-stability**
  A special 'VI' improver minimises the changes in viscosity with operating temperature.
- **Dependable anti-wear and gear protection**
  Long component life.
- **Low temperature performance**
  Excellent oil fluidity at low temperatures.
- **Synthetic base fluids**
  Excellent fluid life in the most demanding applications.

Specifications, Approvals & Recommendations

Suitable for use in applications which require

- Allison C-4
- Aisin JWS 3309 (all applications)
- JASO 1-A, 2A-02
- Ford MERCON® V, MERCON®
- General Motors Dexron®, Dexron® II, Dexron® III
- Toyota T III, T IV
- Suitable for use in Mitsubishi/Hyundai/Kia SP-III, SP-II, Red 1K, Mazda, Nissan Matic-K/J/D, Honda ATF-Z1 and some ZF, Mercedes, Volvo and BMW applications.

See the Application Table and notes for additional vehicle coverage

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

Typical Physical Characteristics

Properties			Method	Shell Spirax S5 ATF X
Flash Point (COC)		°C	ASTM D92	190
Viscosity	@-40°C	mPa s	ASTM D2983	12000
Viscosity	@40°C	mm^2/s	ASTM D445	35
Viscosity	@100°C	mm^2/s	ASTM D445	7.2
Density	@15°C	kg/m^3	ASTM D1298	850

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

Application Table

Spirax S5 ATF-X is suitable for use in the following:

Manufacturer	Fluid Specification		Manufacturer	Fluid Specification
Aisin	JWS 3309		Mini	83 2 0 402 42
ALFA ROMEO	ATF ASW AW-1		Mini	MINI Cooper T-IV
Allison	C4		Mitsubishi	Diamond SP-II
Audi	G 055 025-A2		Mitsubishi	Diamond SP-III
Audi	G 052 162-A1		Mitsubishi	Diaqueen SK
Audi	ATF PN VWG 60 162		Mitsubishi	Diaqueen SP IV
Audi	ATF PN VWG 55 540		Mitsubishi	Diaqueen J2
Bentley	Bentley PY 112995PA		Mitsubishi	Diaqueen J3
BMW	LA2634, ETL-7045E		Mitsubishi	Diaqueen ATF MA1
BMW	LT71141		Mitsubishi	Diaqueen ATF PA
BMW	BMW Mini		Nissan/ Infiniti	Matic-D
BMW	BMW ETL 8072 B		Nissan/ Infiniti	Matic-J (Note 3)
BMW	BMW ZF 5HP18FL, 5HP24, 5HP30		Nissan/ Infiniti	Matic-K
BMW	BMW 83 22 0142 516		Opel	GM 19 40700
BMW	BMW 83 22 2152 426		Opel	GM 19 40767
Chrysler	MS 7176E		Opel	GM 21005966 Transaxle
Chrysler/Dodge/Jeep	05127382AA		Opel	GM 2217466
Fiat	9.55550 AV		Opel	GM 88900925
Ford	MERCON		Opel	GM 9986195
Ford	MERCON V		Opel	Opel (all Vehicle)
Ford	M2C138-CJ		Peugeot	ZF 4HP20
Ford	M2C166-H		Peugeot	Z 000169756
Ford	M2C202-B		Porsche	000 043 205 09
Ford	WSS-M2C924-A (JWS 3309 in Five Hundred and Montego)		Porsche	999 917 547 00 (A2)
Ford	M2C922-A1		Porsche	000 043 202 28
Ford	ATF PN FRD 52 990		Porsche	Z 000169756
GM	Type A, Suffix A		Porcshe	JWS 3309 (Cayenne)
GM	DEXRON		Renault	DP0/AI4
GM	DEXRON-II		Renault	SATF-D
GM	DEXRON-II D		Saab	JWS 3309 and 5 Speed Automatics, Transmax J, TIV
GM	DEXRON-IIIG,IIIH		Scion	T-II, T-III, T-IV
GM	1940700		Subaru	ATF
GM	1940767		Subaru	ATF-HP
GM	210005966		Subaru	K0140Y0700
GM	22717466		Subaru	ATF 5AT
GM	88900928		Suzuki	Dexron III
GM/Saturn	9986195 (JWS 3309)		Suzuki	AT Oil 5D06
Honda/Acura	Premium		Suzuki	ATF 2326
Honda/Acura	ATF-Z1		Suzuki	ATF 2384K
Hyundai	SP-II or SP-III		Suzuki	ATF 3309
Idemitsu	K17		Suzuki	ATF 3314
Isuzu	SCS, ATF-II, ATF-III, Genuine		Suzuki	ATF 3317
Jaguar	JLM 20292		Texaco	ETL-7045E, N402
Jaguar	Fluid 8432		Toyota	Type T-II
Jaguar	JLM 20238		Toyota	Type T-III, and where a Dexron III fluid is allowed
JASO	JASO 1A		Toyota/Lexus	Type T-IV
Jeep	ATF 3		Various	ZF TE-ML 14B
Kia	SP-II or SP-III		Various	ZF-TE-ML 16L
Kia	ATF Red I-K		Various	JWS-3309
Land Rover	LR023288		Voith	55.6335.32 (G607, G1363) Voith DIWA #013S
Land Rover	TYK 500050		Volvo	JWS 3309, 5 Speed Automatics
Land Rover	LRN 13754		Volvo	Volvo 1273.41 and 97340
MAN	339F Ty V-1, V-2, Z-1, Z-2, Z-3		Volvo	97325
Maserati	231603		Volvo	97335
Mazda	ATF M-111		VW	G 055 25-A2, TL-5612, TL-52162

Manufacturer	Fluid Specification		Manufacturer	Fluid Specification
Mazda	ATF MV		VW	ATF PN VWG 52 990
Mazda	ATF D II		VW	ATF PN VWG 52 055
Mazda	ATF M-III		ZF	TE-ML 02F
Mazda	ATF FZ		ZF	TE-ML 03D
Mazda	ATF F1		ZF	TE-ML 04D
Mazda	ATF S1		ZF	TE-ML 09
Mazda	ATF N-1		ZF	TE-ML 11A
Mazda	ATF 3317		ZF	TE-ML 14A/14B/14C
Mercedes-Benz	Sheet 236.1, 236.2, 236.5, 236.6, 236.7, 236.9, 236.10		ZF	TE-ML 16L
Mercedes-Benz	Pre-1996		ZF	TE-ML 17C

Shell Spirax S5 ATF X is suitable in many Kia, pre-2003 VW/Audi, Mazda, Subaru, Suzuki, Isuzu, Hyundai, Daewoo transmissions where a DEXRON®/MERCON®/MERCON® V fluid is allowed.

Application Exceptions

1) Shell Spirax S5 ATF X should not be used where Type F fluids are recommended; check application manual if the vehicle is one of the following: Datsun/Nissan pre 1971, Lincoln pre 1978, Ford/Mercury pre 1981, Toyota pre 1983, Volvo pre 1985, Mazda pre 1986, Saab pre 1993.

2) Shell Spirax S5 ATF X should not be used in Continuous Variable Transmissions (CVTs) or Double Clutch Transmissions (DCTs).

3) Shell Spirax S5 ATF X does not meet the low viscosity requirements of 2006 and later GM vehicles requiring DEXRON®-VI, Ford applications requiring Ford MERCON® LV or Mercon® SP, Shell 1375.4, Toyota WS, Hyundai SP-IV or SPH-IVRR, Nissan Matic-S, Honda ATF DW-1, Chrysler ZF 8 and 9 speed ATF, other ZF 8 and 9-speed ATFs (in a number of European cars), newer Daimler transmissions (ATF 134 or later MB Approval 236.12, 236.14, 236.15 or 236.16) and other specialty transmissions where a low viscosity ATF is recommended.

Where applications allow use of an alternate fluid of a higher viscosity (example Nissan Matic-J when Nissan Matic-S is not available) to one of the above fluid specifications, Pennzoil PlatinumTM High Mileage & Import MV ATF is an excellent recommendation.

DEXRON is a registered trademark of General Motors Corporation. MERCON is a registered trademark of Ford Motor Company.

Health, Safety & Environment

- **Health and Safety**

  Shell Spirax S5 ATF X 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

- **Colour**

  Shell Spirax S5 ATF X is dyed red for identification purposes.

- **Advice**

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