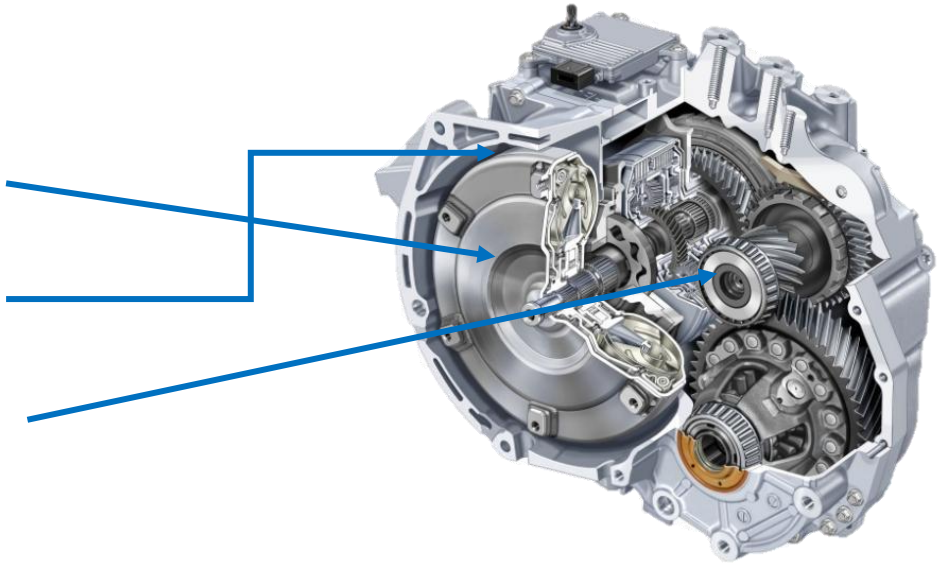
# Automatic Transmission Fluid - ATF

**A**utomatic **T**ransmission **F**luid (ATF) has 4 purposes :

- **Transmission of Power** between Engine and Transmission (through Torque converter)
- **Actuation** of clutches and brakes (through Valve Body)
- **Lubrication** and **cooling** of rotary parts (Gears, Frictions, Bearings Bushings…)



Our Automatic Transmission Fluid (ATF) meets the **highest standards for shifting** quality and **reliability**, satisfying even the most demanding requirements.

OE ATF are **developed** in tandem **with the design and rigorous testing** of the transmissions, as it **directly influences major critical areas** of its functionality.
This is why we choose to offer you the OE ATF ensuring your vehicle performs at its best.

For optimal performance of AISIN transmission, always use ATF with the correct designation.

# Viscosity



| Viscosity | | |
|---|---|---|
| Low | Medium | High |
| AW2 | AW1 | T-IV |

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# AISIN ATF Evolution

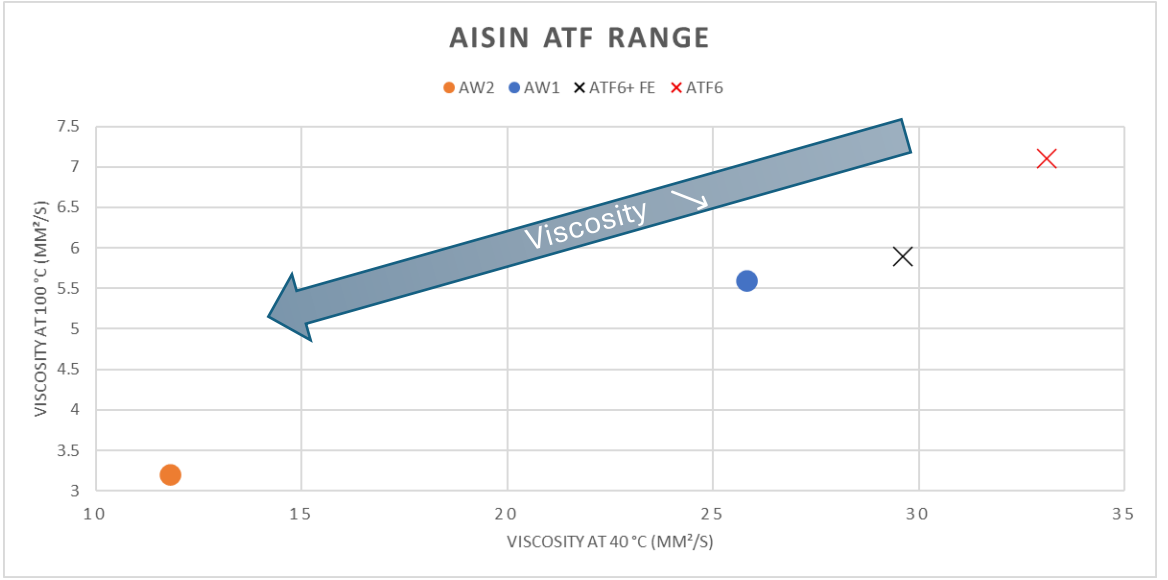
**Each ATF evolution reflects a shift toward greater fuel efficiency, smoother shifting, and extended fluid life, in line with advancing transmission technologies.**

**T-IV** (JWS3309) was the standard ATF for early 4- and 5-speed Aisin transmissions, offering moderate viscosity, basic additive chemistry, and balanced performance.

**WS** (JWS 3324) introduced lower viscosity for improved fuel economy, better thermal and oxidation stability, and longer service life—optimized for 6-speed Aisin transmissions.

**AW1** further reduced viscosity to enhance cold-start flow, improve shift smoothness, and extend durability—designed for 6- to 8-speed Aisin transmissions.

**AW2** represents the latest generation of ATF, featuring super low viscosity (~50% lower than AW1) and ester-based additives for maximum efficiency, superior wear protection, and thermal stability—engineered for modern 8-speed Aisin transmissions




| ATF Type | Viscosity | Era | Transmission Compatibility |
|---|---|---|---|
| T-IV | Medium | Early 2000s | Older Aisin Warner ATs (e.g., AW55-50SN, TF60) |
| WS | Low | Mid-2000s | 6-speed Aisin ATs (e.g., U660E, U760E)<br>Mainly Toyota-Lexus |
| AW1 | Lower than WS | 2010s | 6-8 speed Aisin ATs (e.g., TF-80SC, TF-81SC) |
| AW2 | Super Low | 2020s–present | Latest 8-speed Aisin ATs (e.g., AWF8G30, eATN8) |

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# ATF Type T-IV – Premium ATF 6




## DETAILS ABOUT AISIN Premium ATF 6

- **Enhanced Compatibility:** Specifically formulated for Aisin Warner transmissions requiring T-IV, ensuring optimal performance and protection across a wide range of vehicles.
- **Smooth Shifting & Wear Protection:** Delivers excellent frictional properties for smooth gear changes and robust anti-wear additives to protect transmission components over time
- **Reliable Wear Protection:** Formulated with advanced anti-wear additives and a high viscosity index to ensure long-lasting transmission protection and consistent performance across both high and low temperatures.

## SPECIFICATIONS : WIDE RANGE OF APPLICATION REQUESTING HIGHER VISCOSITY ATF

**Type T-IV ; JWS 3309 / JWS 3317 ; JASO M315 Type**

**Toyota / Lexus** T-II, T-III, T-IV **// GM** Dexron IID, Dexron IIE, Dexron IIIG, Dexron IIIH GM Dexron II/IID/IIE/IIIG/IIIH

**BMW** ATF 6 : 7045E / 8072B / LA2634 / LT71141 ; **Chrysler / Dodge / Jeep** MS 9602, ATF +4, ATF +3 ; **Fiat** 9.55550-AV4 ; **Ford** Mercon V ; **Hyundai/Kia** SP-II/SP-III/RED-1K**, Mazda M-III ; Mercedes** MB 236.14, MB 236.12 **; Mitsubishi** SP-II, SP-III, ATF-J2 ; **Nissan** Matic-D, Matic-J, Matic-K ; **Subaru** ATF HP**,** Suzuki ATF 3314/3317 / **Volvo** 1161540 **// VW** G 052 025 / 052 055 / 052 162 / 052 990 / 055 025

**ZF ATF M-1375.4 (6HP) ; ZF** LIFEGUARDFLUID 5

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Link : Aisin Premium ATF 6

# ATF WS – ATF 6+FE



## DETAILS ABOUT AISIN ATF 6+ FE:

- **Enhanced Compatibility:** Meets or exceeds multiple OEM specifications (e.g., JWS 3324, Ford Mercon LV, GM Dexron VI, Hyundai SP-IV, Toyota WS), making it suitable for a wide range of modern automatic transmissions
- **Fuel Economy Support:** Optimized viscosity profile helps reduce internal transmission drag, contributing to improved fuel efficiency without compromising protection
- **Enhanced Shift Quality & Protection:** Provides smooth gear transitions and robust wear protection under a wide range of operating conditions

## SPECIFICATIONS : WIDE RANGE OF APPLICATION REQUESTING LOW VISCOSITY ATF WITH FUEL-SAVING PROPERTIES

**Aisin Warner JWS 3324 / AW-1 ;**

**Toyota / Lexus** ATF WS ; **BMW** ATF 2/3+/6/7 / 7045E/8072B/LA2634/LT71141 ; **Ford** Mercon LV, Mercon SP ; **PSA** B71 2340

**GM** Dexron VI/II/IID/IIE/IIIG/IIIH ; **Honda** ATF DW-1 ; **Hyundai / Kia** SP-IV, SP-IV M, SP-IV RR, SPH-IV ; **Mazda** FZ ; **Allison** C3/C4 / TES-389/468

**Chrysler** ATF+/+2/+3 ; **Mercedes** MB 236.41; **Nissan** Matic K, Matic S, Matic W ; **Fiat** 9.55550-AV5/AV6 ;**Tesla** ATF9 / EDF2 Model S/3/X ; **Honda** ATF 3.0/3.1/DW-1/Z1(except in CVT) ; **Mazda** M-III/A7 ; **Mitsubishi** SP-II/SP-III/SP-IV/J2/J3/PA/MA1 ; **Subaru** ATF 5AT/HP, **Suzuki** ATF 3314/3317 ; **VW** G 053 001 / 053 025 / 055 005 / 055 162 / 055 540 / 060 162

**ZF** 3-/4-/6-/8-/9-speed / TE-ML 05L/09/11A/B/21L

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Link : Aisin ATF 6+ Fuel Economy

# OE ATF-AW1




## DETAILS ABOUT ATF AW1 :

- **OEM-Validated Compatibility:** Developed alongside Aisin transmission platforms and approved for a wide range of OEMs
- **Superior Lubrication & Shift Quality:** Ensures smooth gear transitions and excellent wear protection, even under demanding driving conditions
- **Viscosity Stability:** Maintains optimal fluid performance without excessive thinning or thickening, ensuring consistent operation across a wide temperature range
- **Thermal & Mechanical Resilience:** Performs reliably under high thermal and mechanical stress, supporting long-term transmission durability

## SUITABLE FOR TRANSMISSION CODE :

**F22 / TG-81 :** AWF8F45, AF50, GA8F22AW - AQ450 (09P, 09Q)

**F21-250 / TF-70 :** AWF6F25, AM6 , GA6F21AW

**F21++ / TF-80 :** AWF6F45, AT6, AF40

**R22 / TR-80 :** AL1000 (0C8)

## COMPATIBLE WITH :

**BMW** : 83 22 2 355 599 (ATF6) - **CITROËN / PEUGEOT** : 9734R7 – **JLR** : LR022460 - **OPEL / GM** : 09117946, 19 40 773

**TOYOTA / LEXUS** : JWS3324 - **VOLVO** : 31256774, 31256775, 31256776 - **VOLKSWAGEN** : G 055 540, G 055 025

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Link : Aisin ATF AW1

# OE ATF-AW2




**DETAILS ABOUT ATF AW2 :**

- **OEM-Validated Compatibility:** Developed alongside Aisin transmission platforms and approved for a wide range of OEMs
- **Super Low Viscosity:** Approximately 50% lower kinematic viscosity at 40°C compared to AW1, significantly reducing churning losses and improving fuel economy
- **Advanced Base Oils & Additives:** Uses high-performance base oils with low traction coefficients and ester-type additives, enhancing fatigue life of gears and bearings under severe conditions
- **Superior Durability & Lubricity:** Outperforms conventional ATFs in durability tests and provides excellent wear protection, ensuring long-term reliability in modern 8-speed Aisin transmissions

## SUITABLE FOR TRANSMISSION CODE :

**8G30 :** ATN8, AWF8G30, 09S
**8G30h** : eATN8
**8G45** : AMN8, AWF8G45
**8G55** : AWF8G55

## COMPATIBLE WITH :

**CITROËN / DS / OPEL / PEUGEOT** : 16 350 560 80 – **BMW** : 83 22 2 413 477 -

**VOLVO** : 31492172, 31492173 - **VOLKSWAGEN** : G 053 001, G 060 540

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Link : Aisin ATF AW2

# AISIN OE AW2 Vs Competitors

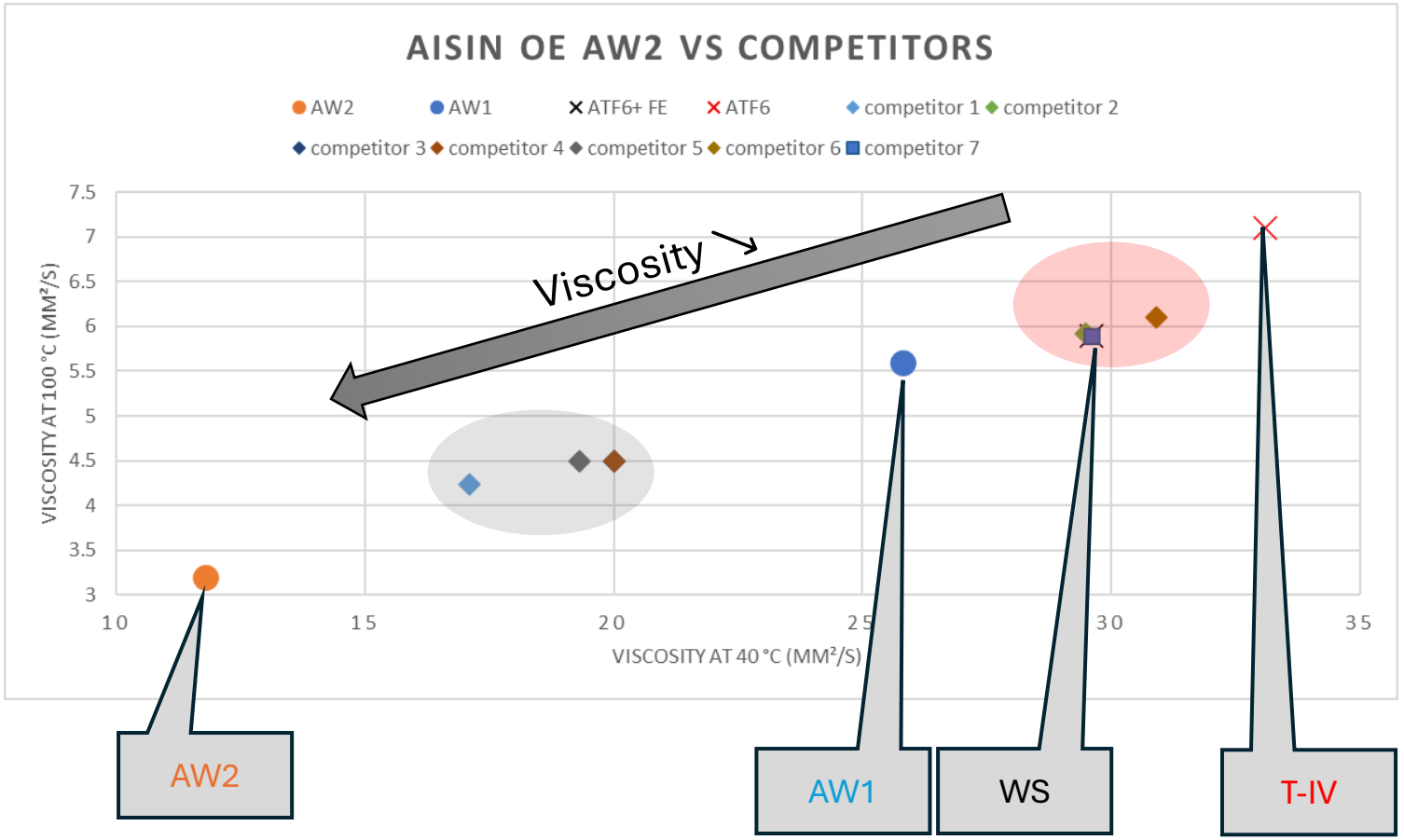
AW2 is very specific as a super low viscosity.

This chart comparing viscosity of 7 **competitors's product informed as compatible with AW2.**

There is no equivalent product :

3 of them have a proposal with lower viscosity than AW1.

4 are promoting an ATF with higher viscosity than AW1.



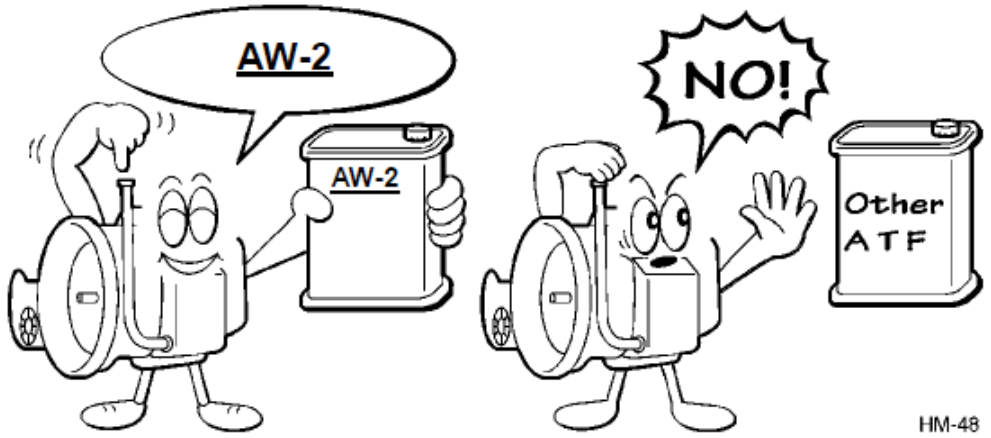

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# Impact of not correct ATF

**Replacing AW-2 by another spec** ATF can cause :

- Several failure of "Harsh shift"/"Shocks" or "Burning of disc".
- Early mileage deterioration of shift quality
- PBW response deterioration (Park By Wire)




➔Each Transmission generation needs its corresponding ATF

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