

668 SynTuff™ HD Full Synthetic ATF

SynTuff™ HD Full Synthetic ATF is a heavy-duty, automatic transmission fluid specifically formulated for on-highway automatic transmissions operated under severe operating conditions. SynTuff™ HD Full Synthetic ATF is designed to provide oxidative stability, anti-wear performance, extended anti-shudder durability, and clutch friction durability for commercial applications where severe-duty or heavy-duty fluids are specified.

SynTuff™ HD Full Synthetic ATF is formulated with a combination of select synthetic base fluids and proprietary additive technology to provide the following advantages:

PERFORMANCE

- Enhanced long-term and stable frictional properties provide anti-shudder protection, reduced noise vibration, smooth shifting performance, and high torque capacity to avoid clutch slippage and wear.
- Carefully balanced frictional modification that allows for the proper friction retention for long-life performance and smooth lock-ups.
- Extended anti-shudder and clutch friction durability throughout the service life of the fluid
- Excellent low-temperature fluidity for faster oil flow to all critical components and smoother, quicker shifting at low-temperature start-up and operation.
- Excellent anti-foam and filterability characteristics to ensure efficient and effective lubrication and hydraulic control system performance.
- Extended service life with extended drain capabilities.

DEPOSIT PROTECTION

- Excellent thermal and oxidative stability keeps the transmission clean and prevents the formation of sludge deposits and fluid thickening.
- Exceptional rust and corrosion protection.
- Excellent seal and materials compatibility to maintain seal integrity and prevent leaks.
- Excellent shear stability that leads to viscosity retention even under the most severe, heavy-duty, high-temperature operating conditions.
- Very low volatility characteristics.

WEAR PROTECTION

- Excellent wear protection that helps reduce wear on the gears, bearings, and clutches even under severe duty conditions.
- Extended clutch plate and band life
- Excellent operating temperature reduction that allows for longer oil and component life.

SynTuff™ HD Full Synthetic ATF is recommended for use in the following applications

- Suitable for use in Allison transmissions that specify automatic transmission fluids (after warranty)
- GM Dexron® II-D, III-G, III-H
- Ford Mercon® and Mercon® V
- Volvo 97340/97341
- JASO 1-A
- MAN 339 Type V1, V2
- Voith Transmissions H55.6335.xx and H55.6336
- Mercedes Benz 236.92
- Caterpillar AT-1

SynTuff™ HD Full Synthetic ATF is not recommended for use in those passenger cars and light duty trucks that specify the use of Chrysler Mopar NVG 246, Ford Type F, Ford M2C33F, Ford Mercon® C, Ford Mercon® LV, Automatic Transmission Fluid Type G, GM Dexron® VI, Honda CVT, Honda Genuine, JWS 3324 (WS), Nissan CVT type fluids, or in dual clutch transmissions (DCT) or continuously variable transmissions (CVT).

TYPICAL PROPERTIES

Density @ 60°F (15°C) (ASTM D4052)	0.8446
Viscosity, cSt @ 40°C (ASTM D445)	32.83
Viscosity, cSt @ 100°C (ASTM D445)	6.73
Viscosity Index (ASTM D2270)	168
Brookfield Viscosity @ -30°C (-22°F) (ASTM D2983)	2,315
Brookfield Viscosity @ -40°C (-40°F) (ASTM D2983)	7,350
Flash Point °F (°C) (ASTM D92)	460° (238°)
Pour Point °F (°C) (ASTM D5950)	-79.6° (-62°)
Visual Color	Red