



THE
**GOOD
STUFF**

SHP[®] Syngear FE

SHP Syngear FE is a next-generation, synthetic, fuel-efficient (FE) API GL-5 automotive gear lubricant designed for use in passenger car and truck axles with hypoid gear sets operating in extreme temperatures or under severe driving conditions. It has been specifically formulated to provide improved fuel economy compared to typical mineral SAE 80W-90 or synthetic SAE 75W-90 gear oils.

SHP Syngear FE is formulated to provide long service life, extended gear life and better fuel economy in automotive differentials operating under varying conditions of speed, load, temperature and torque. The carefully balanced formulation is designed to minimize oxidative sludge and varnish formation, reduce wear, prevent scoring damage, and protect against metal fatigue and spalling damage under shock-load conditions. The full-synthetic formulation provides enhanced oxidation resistance and thermal stability at high temperatures and better low-temperature properties compared with conventional mineral oil-based automotive gear oils, resulting in longer service intervals and better performance over a wider temperature range. In standard industry and commercial fleet tests, this product has shown a fuel savings of 1.0-1.5% compared to typical synthetic SAE 75W-90 gear oils.

SHP Syngear FE is fully approved for 500,000-mile drain intervals in drive axles in linehaul service under Dana[®]/Eaton[®] Roadranger[®] extended warranties.

Applications

- Service fill of conventional differentials in passenger cars and trucks
- Top-off only of limited-slip differentials in passenger cars and light trucks⁽¹⁾
- Service fill of differentials, final drives and transfer cases in some off-highway equipment
- Non-synchronized manual transmissions in trucks, buses and heavy equipment where the manufacturer specifies an API GL-5 or MT-1 gear oil

⁽¹⁾ **Note:** *For complete drain and refill, many limited-slip differentials may require the manufacturer's specified gear lubricant or supplemental additive. Refer to the owner's manual for specific requirements.*

SHP Syngear FE meets or exceeds the requirements of:

- API Service GL-5, MT-1
- International (Navistar) TMS 6816
- Mack GO-J Plus
- Meritor O76-N
- MIL-PRF-2105E
- SAE J2360

**Premium
Synthetic,
Fuel-Efficient
Automotive Gear
Lubricant, API
GL-5/MT-1**



SHP Syngear FE is approved for service fill under the following OEM specifications:

- Dana SHAES-256 Rev C, SHAES-429

Features/Benefits

- Extended drain, all-season performance
- Outstanding oxidation resistance and thermal stability to minimize sludge and varnish formation
- Excellent thermal durability and extreme-pressure properties for extended gear life
- High load-carrying capacity for protection against scuffing and wear
- High shear stability
- Outstanding low-temperature properties
- Protects against rust and corrosion
- Good foam resistance
- Higher fuel efficiency compared to typical conventional SAE 80W-90 and synthetic SAE 75W-90 gear oils

SHP[®] Syngear FE

Typical Properties	
SAE Grade	75W-90
Specific Gravity @ 60°F	0.891
Density, lbs/gal @ 60°F	7.42
Color, Visual	L 2.0
Flash Point (COC), °C (°F)	215 (419)
Pour Point, °C (°F)	-45 (-49)
Viscosity, Brookfield	
cP @ -40°C	90,000
Viscosity, Kinematic	
cSt @ 40°C	103
cSt @ 100°C	15.0
Viscosity Index	152

Health Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://3apps.phillips66.com/NetMSDS>.

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Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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