

SYNTHETIC BLEND ENGINE OILS

Protects against the formation of sludge, varnish and rust. Meets API Service Categories SM, SL, SJ, Energy Conserving ILSAC GF-4 and GF-3 specifications. Meets Car Manufacturers Warranty Requirements for Gasoline Engines where API SM oils are specified.

PRODUCT DESCRIPTION

FormulaShell[®] Synthetic Blend Engine Oils are engineered to provide outstanding engine protection and performance. Its advanced formulation combines quality mineral oils with synthetic oils for excellent cleanliness, thermal stability and antiwear protection. FormulaShell[®] Synthetic Blend Engine Oils meet all automobile and light duty truck warranty requirements for gasoline and turbocharged engines where API SM and ILSAC GF-4 oils are recommended. This oil can be used in place of API SL, SJ, SH, SG and ILSAC GF-3 specification oils. Follow manufacturer's recommendations for viscosity grade and API Service Category.

FormulaShell[®] ENGINE OILS are formulated with high viscosity index, thermally stable base stocks and select additive systems to provide protection for the demands made on modern crankcase lubricants. These oils provide a high level of protection against wear, rust and corrosion, piston scuffing and combustion chamber deposits, high temperature oxidation and valve train wear.

FEATURES AND BENEFITS

- Excellent cleanliness, thermal stability and anti-wear protection
- Meets API SM and ILSAC GF-4 and GF-3 energy conserving requirements
- Meets GM 6094M for low-temperature pumpability
- Meets Chrysler MS 6395

PRECAUTIONS

The petroleum hydrocarbons used in this product have been severely hydrotreated and/or solvent refined and are considered non-hazardous under current OSHA regulations. Good hygiene, which includes regular washing of skin with soap and water and frequent changing of soiled clothing, should be used to avoid possible irritation and/or dermatitis. The formation of oil mists should be avoided. Note that used motor oil, that is oil which has been exposed to the very high temperatures of internal combustion engines, tends to contain higher amounts of aromatics, which have been linked to skin cancer in certain laboratory studies.

WARNING

"Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to the heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner.

TYPICAL PHYSICAL AND CHEMICAL PROPERTIES FormulaShell[®] SYNTHETIC BLEND ENGINE OILS

TEST	TYPICAL RESUL	TYPICAL RESULTS	
SAE Viscosity Grade	5W-30	10W-30	
API Gravity	32.60	31.37	
Viscosity, cSt, 40°C	63.86	70.74	
Viscosity, cSt, 100°C	10.67	10.6	
Viscosity Index	158	139	
Flash Point, °C (°F)	215 (420)	221 (430)	
Pour Point, °C (°F)	-33 (-27)	-33 (-27)	
Viscosity, cP, Max 6600 @	-30°C (-22°F)		
cP, Max 7000 @		-25°C (-13°F)	
Low Temp. Pumping, max	-35°C (-31°F)	-30°C (-22°F)	
Viscosity, cP Max	40,000	40,000	
Material Number			
12/1 quart	5021012031	5021112031	