ECOSE® SYNTHETIC MOTOR OIL

MEETS OEM DEMANDS FOR IMPROVED PERFORMANCE TO COMBAT LOW SPEED PRE-IGNIGTION (LSPI)

ECOSE® Synthetic Motor Oil is uniquely formulated with an advanced additive system proven to provide protection against low-speed pre-ignition **(LSPI)** [1] often occurring in high performance turbocharged gasoline direct-inject engines **(TGDI)**. They are fully synthetic, multi-grade automotive lubricants formulated to meet or exceed the warranty requirements of most major manufacturers of gasoline engines. Extending oil change intervals and overall engine maintenance is greatly improved due to the full-synthetic formulations these fluids offer. They offer excellent low temperature capabilities for rapid engine protection at start-up.

ECOSE® Synthetic Motor Oils can help optimize fuel economy, oxidation control, and lower emissions more than comparable conventional oils. They are suitable for use in four-stroke gasoline engines used in passenger cars, light trucks, SUVs, motorcycles, generators and other equipment. All viscosity grades meet the performance requirements of the latest gasoline-fueled engine service **ILSAC GF-5/Resource Conserving** (excludes **SAE 0W-16** and **0W-40** viscosity grades) and **API SN Plus.**

ECOSE® Synthetic 0W-30 and 0W-40 Motor Oils provide exceptional cleaning power, wear protection and overall performance. They are recommended for many types of modern vehicles where they will help provide unsurpassed performance especially when operating under severe driving conditions.

ECOSE® Synthetic 0W-16 is ultra-low viscosity engine oil designed to help provide long engine life and outstanding protection in vehicles such as Toyota and Honda where a SAE 0W-16 is specified. **ECOSE® Synthetic 0W-16** is classified by The American Petroleum Institute (API) to meet or exceed **API service SN Plus.**

Approvals/Recommended For Use:

	0W-16	0W-20	0W-30	0W-40	5W-20	5W-30	10W-30
API SN Plus, SN	X	X	X	X	X	X	X
ILSAC GF-5 / Resource Conserving	X	X	X	-	X	X	X
Ford WSS-M2C945-A	-	-	-	-	X	-	-
Ford WSS-M2C946-A	-	-	X	-	-	X	-
Ford WSS-M2C947-A	-	X	-	-	-	-	-
Chrysler MS-6395	-	X	X	-	X	X	X
GM 4718M**	-	-	X	X	-	X	X
GM 6094**	-	-	X	X	X	X	X
Toyota/Honda	X	X	X	-	X	X	X

****Obsolete**

Always consult your owner's manual for proper lubricant selection.

AVAILABILITY:

ECOSE® Synthetic Motor Oils are available throughout Nu-Tier Brands' marketing area. Your Nu-Tier representative can provide specific information. Need additional information? Call Nu-Tier Brands @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com

07/18

TYPICAL PROPERTIES:

SAE Grade		0W-16	0W-20	0W-30	0W-40	5W-20	5W-30	10W-30
Product Code	**Test Method**	**530208**	**530212**	**530215**	**530218**	**530210**	**530211**	**530213**
Kinematic Viscosity, cSt at 40°C	ASTM D-445	36.5	46.0	60.5	73.6	45.8	61.5	65.5
Kinematic Viscosity, cSt at 100°C	ASTM D-445	7.2	8.6	10.8	13.2	8.5	11.0	10.4
Viscosity Index, calculated		162	168	175	181	165	175	147
Cold Cranking at temp °C, cP	ASTM D-5293	5000 at -35	5000 at -35	5400 at -35	5700 at -35	4800 at -30	3800 at -30	4800 at -25
Total Base Number, mg KOH/g	ASTM D-2896	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Pour Point, °C	ASTM D-97	-45	-43	-45	-45	-42	-40	-37
HTHS Viscosity	ASTM D-4683	2.6	2.6	3.4	3.6	2.8	3.1	3.2
Sulfated Ash, Wt %	ASTM D-874	0.80	0.80	0.80	0.80	0.80	0.90	0.90
Phosphorus, Wt %	ASTM D-4981	0.077	0.077	0.077	0.077	0.077	0.077	0.077
Highest API/ILSAC Performance		SN+ / GF-5	SN+ / GF-5	SN+ / GF-5	API SN+	SN+ / GF-5	SN+ / GF-5	SN+ / GF-5

Note: Values shown are typical only and do not constitute a specification. Minor variations in product are to be expected in normal manufacturing. Always confirm with the original manufacturer's recommendation for proper equipment operating requirements.

[1] LSPI is a premature ignition of the air-fuel mixture in the combustion chamber. This low-speed pre-ignition is very violent and causes over pressurization of the combustion chamber that can lead to damage and failure of the piston, rings, valves, and other internal components.