Superflo

Premium Automotive Engine Oil

Product Description

Supeflo is a premium motor oil that incorporates excellent anti-wear protection, as well as, protection against sludge and deposit formation. The SAE 5W-20, 5W-30 and 10W-30 grades meet the highest API quality requirement (SM) for gasoline engine passenger cars, sport utility vehicles, vans and light trucks and. are also ILSAC (International Lubricant Standardization and Approval Committee) GF-4 approved. This certifies that these oils meet the highest API performance standards and are preferred by most American and Japanese car manufacturers.

Features & Benefits

The SAE 5W-20, 5W-30 and 10W-30 grades satisfy API Category SM, which is the highest API quality recommended for gasoline powered vehicles.

The gasoline engine tests that describe the minimum quality for Category SM require a high level of protection against high temperature deposits, ring sticking, camshaft and hydraulic valve lifter wear, oil thickening due to high temperature oxidation, rusting, and bearing wear.

The complete engine protection provided by Superflo is the result of high quality base oils plus highly effective additives, including detergents, dispersants, and anti-wear additives, plus inhibitors against oxidation, rust, and foam.

Sludge and varnish deposits are controlled by detergents and dispersants that prevent agglomeration and settling out of minute sludge particles. Contaminants remain suspended in the oil and are drained when the oil is changed. Freedom from sludge and varnish is critical to long life and reduced wear of moving engine parts. The rust inhibitor in Superflo effectively retards the formation of rust in hydraulic valve lifters and other critical parts.

Cold-starting your car can damage critical engine parts if they are not adequately and rapidly lubricated. Superflo multi-grades are specially formulated for quick flow to engine components at start-up, providing Protection That's Fast. Protection That Lasts! ™

Metal bearing surfaces in an engine appear to be smooth but actually contain sharp, microscopic peaks, called asperities. When two surfaces slide against each other under heavy loads, asperities can penetrate the lubricant film and collide with each other, creating additional friction, which reduces engine efficiency.

The friction modifiers in Superflo provide a strong oil film and reduce contact between asperities. Three grades - SAE 5W-20, 5W-30 and 10W-30 - have demonstrated fuel-saving benefits in the ASTM industry standard engine test. Superflo 5W-20, 5W-30 and 10W-30 carry the API's highest fuel economy rating, "Energy Conserving." These new GF-4 quality oils also provide fuel economy retention over the life of the oil.

Prolonged exposure to heavy-duty service at high temperatures can cause some oils to oxidize and thicken to the point that they are barely able to flow. This is called oxidation thickening and has become more common due to trailer pulling, summer stop & goes driving, and higher engine temperatures associated with emission controls and more aerodynamic engine designs. Superflo has excellent oxidation resistance, as demonstrated in the ASTM Sequence IIIG engine test, which is designed to determine an oil's performance under these extreme operating conditions.

Superflo 10W-40, 20W-50, SAE 30 and SAE 40 viscosity grades meet API SL requirements.

- Designed to flow at low temperatures to get to vital engine parts quickly
- Resists oxidation thickening to maintain proper flow under severe operating conditions
- Provides excellent deposit and wear protection
- Available in seven viscosity grades
- SAE 5W-20, 5W-30 & 10W-30 grades meet API SM, API “Energy Conserving” and ILSAC GF-4

Applications

Superflo is available in five multi-grades and two straight grades that provide a wide range of viscosities to meet a variety of climatic conditions. The SAE 5W-30 and 10W-30 grades are ILSAC GF-4 certified and are the recommended oils for new American and Japanese vehicles. The SAE 5W-20 is also ILSAC GF-4 certified, but it is recommended for vehicles which specifically call for this viscosity grade in the owner’s manual, including many late model Ford , Mazda, Honda and certain 2005 Chrysler vehicles.

Beginning in 1994, most automakers specified the use of ILSAC motor oils in their new car manuals. These oils carry a special “starburst” seal on the front container labels.

The SAE 10W-40 and 20W-50 grades are formulated for use in engines where extra, high-temperature protection is desired or for engines experiencing high oil leakage or consumption. Consult your automobile owner’s manual for the recommended viscosity grade for your vehicle.

Specifications & Approvals

Exxon Superflo meets the following industry specifications:	**5W-20**	**5W-30**	**10W-30**	**10W-40**	**20W-50**	**30**	**40**
API SM	**X**	**X**	**X**				
API SL	**X**	**X**	**X**	**X**	**X**	**X**	**X**
API SJ	**X**	**X**	**X**	**X**	**X**	**X**	**X**
API Energy Conserving	**X**	**X**	**X**				
ILSAC GF-4	**X**	**X**	**X**				

Typical Properties

Exxon Superflo							
SAE Grade	**5W-20**	**5W-30**	**10W-30**	**10W-40**	**20W-50**	**30**	**40**
API Service Classification	SM	SM	SM	SL	SL	SL	SL
Viscosity							
cSt at 40°C	47.0	62	71	94	162	100	140
cSt at 100°C	8.3	10.5	10.6	14.1	18.1	11.5	15.0
CCS, cP	5180@ -30 °C	5500@ -30 °C	6300@ -25 °C	6400 @ -25 °C	8200 @ -15 °C	-	-
Viscosity Index	153	159	137	147	124	107	105
Flash Point, °C (°F), ASTM D 92	200 (392)	200 (392)	200 (392)	226 (439)	240 (464)	234 (453)	245 (473)
Pour Point, °C (°F)	-39(-38)	--39(-38)	-36 (-33)	-33 (-27)	-21 (-6)	-21 (-6)	-18 (0)
Gravity, API	33.6	33	29.2	30.0	27.4	27.0	27.8
Energy Conserving	Yes	Yes	Yes	No	No	No	No

Health & Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the applications referred to above and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contact office, or via the Internet. This product should not be used for purposes other than the applications referred to above. If disposing of used product, take care to protect the environment.