

## Passenger Car Motor Oils

100% Synthetic – GM dexos1 - Super-Duty - Heavy Duty - Non-Detergent

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**Wolf's Head 100% Synthetic Motor Oils** offer the ultimate in engine protection for both gasoline and diesel engines - even those that are turbo-charged or super-charged. Formulated with state-of-the-art additives and 100% synthetic base stocks, Wolf's Head 100% Synthetic Motor Oil has been carefully developed to meet the most current API Service Classification. Wolf's Head 100% Synthetic Motor Oil is formulated to meet or exceed all new car manufacturers' warranty requirements as well as stringent industry standards such as API SN/CF, ILSAC GF-5 and meets most European ACEA specifications. These oils are also formulated to exceed the standard for the Thermal Engine Oil Stability Test (TEOST MHT) and the Ford WSS M2C factory and service fill specifications. See the applications chart for specific viscosity and specification application. The special low-phosphorous level design ensures that these superior oils are environmentally friendly and will help to extend the life of the expensive catalytic converters. These full-synthetic oils offer the ultimate in engine protection for engines operating in the most extreme driving and operating conditions and in the worst ambient operating temperatures from the extreme arctic cold to the searing desert heat. Wolf's Head 100% Synthetic Motor Oil exceeds the stringent lubricating performance requirements of American, European, Korean, Japanese and other worldwide engine manufacturers.

**Wolf's Head 100% Synthetic 0W-20, 5W-20 & 5W-30 dexos1®** are specifically engineered and licensed to meet the stringent GM dexos1® engine oil specification, as well as all of the specifications outlined above for the Wolf's Head 100% Synthetic motor oils.

**Wolfs Head Super-Duty Motor Oils** are multi-viscosity oils that provide superior engine protection no matter what the operating temperature. Wolf's Head Super-Duty Motor Oils protect domestic and imported vehicles and equipment powered with either gasoline or diesel engines even those that are turbo-charged or super-charged equally well. This high quality oil has been specifically formulated to meet or exceed all new car manufacturers' warranty requirements as well as the stringent industry standards API SN/CF - ILSAC GF-5 and meets most European ACEA specifications. These oils are also formulated to exceed the standard for the Thermal Engine Oil Stability Test (TEOST MHT) and the Ford WSS M2C factory and service fill specifications. See the applications chart for specific viscosity and specification application. Wolfs Head Super-Duty will protect with equal vigor both new, modern, close-tolerance engines and older, high-mileage engines running in a wide range of operating temperatures and conditions. These high performance motor oils exceed the stringent lubricating performance requirements of American, European, Korean, Japanese and other worldwide engine manufacturers.

**Wolfs Head Heavy-Duty Motor Oils** are single grade or straight-viscosity motor oils. They are a balanced blend of high VI base stocks and an advanced additive package to deliver superior performance. They provide thermal and oxidation stability, deposit control, anti-wear protection, corrosion protection and improved pumpability. Wolfs Head Heavy Duty Motor Oils may be used in turbo-charged, super-charged or naturally aspirated foreign and domestic engines recommending an API SN/CF and ACEA mono-grade engine oil. These heavy duty motor oils exceed the stringent lubricating performance requirements of American, European, Korean, Japanese and other worldwide engine manufacturers.

**Wolfs Head Hydraulic and Compressor Oil - Non-Detergent Motor Oil** is a high quality mineral crankcase engine oil and general purpose oil. While modern applications are mostly in small compressor and hydraulic systems, Wolfs Head Non-Detergent Motor oil is built from high-quality mineral base stocks and may be used in crankcase engine applications wherever API SA/SB mono-grade oil is recommended.

## TYPICAL INSPECTION DATA – Passenger Car Motor Oils

	API Gravity	Flash Point, °C.	Viscosity cSt @ 100C	Viscosity cSt @ 40C	VI	Pour Point, °C.
100% Synthetic Motor Oil						
0W-20 (dexos1®)	36.0	210	8.4	45.0	160	-45
5W-20 (dexos1®)	35.0	210	8.7	51.5	150	-45
5W-30 (dexos1®)	34.0	210	11.0	67.0	160	-42
5W-40	34.0	220	14.0	90.0	160	-42
Super-Duty Motor Oils						
5W-20	31.3	200	6.50	37.0	130	-42
5W-30	30.5	200	10.50	60.0	145	-39
10W-30	29.5	205	10.50	69.0	140	-35
10W-40	30.0	205	13.50	97.0	145	-32
15W-40	29.0	215	14.00	100.0	135	-27
20W-50	28.9	220	18.00	165.0	125	-18
Heavy Duty Motor Oils						
30	28.5	220	11.80	103.0	103	-21
40	28.0	230	14.60	141.0	103	-15
Non-Detergent						
30	23.2	200	10.10	-	-	-12

# PERFORMANCE APPLICATION CHART

SPECIFICATIONS	100% Synthetic	Super Duty Motor Oils	Heavy Duty	Non-Detergent
<b>API:</b>				
SN, SM, SL, SJ	√	√	√	-
SG, SF	√	√	√	-
SB	√	√	√	√
CF/CF-2	√	√	√	-
CF-4	-	-	-	-
<b>ILSAC:</b>				
GF-5, GF-4/GF-3/ GF-2	√	√	-	-
<b>ACEA:</b>				
A3/B4, A3/B3	*	*	*	-
A5/B5, A1/B1	*	*	*	-
C3, C2, C1	*	*	*	-
<b>Ford:</b>				
M2C 946 A	5W-30	5W-30	-	-
M2C 929 A (M2C 205A)	5W-30	5W-30	-	-
M2C 945A	5W-20	5W-20	-	-
M2C 930A (M2C 153H)	5W-20	5W-20	-	-
<b>DaimlerChrysler:</b>				
MS 6395K	√	-	-	-
<b>Mercedez Benz</b>				
MB 229.1	√	-	-	-
MB 229.3	√	-	-	-
MB 229.31	5W-30, 5W40	-	-	-
MB 229.5	√	-	-	-
MB 229.51	5W-30, 5W40	-	-	-
<b>General Motors:</b>				
GM dexos1®	0W-20, 5W-20, 5W-30	-	-	-
GM 4718M	√	-	-	-
GM 6094M	√	√	-	-
<b>Volkswagen:</b>				
VW 50200	√	√	-	-
VW 50300	√	5W-30	-	-
VW 50500	√	√	-	-
VW 50501	√	5W-30	-	-
VW 50600	√	5W-30	-	-
VW 50700	5W-30	-	-	-
<b>BMW:</b>				
LL-O/M54	√	√	-	-
LL-04	√	-	-	-
CID AA-52039	√	√	√	-
Mil-L-2104-B	√	√	√	-
Mil-L-46152	√	√	√	-

\* Suitable for Use