



**Evolutionary Performance™**

**Available in 5 Qts x 3 Case**



## Why MAG 1®

MAG 1® motor oils and lubricants are designed to keep pace with today's engine demands, requiring lighter viscosities and increased power densities. It's the only brand with FMX® Technology System, which meets the difficult challenges of effectively balancing performance, strength and durability.

## FMX® TECHNOLOGY AT WORK

New demands and conditions call for new technology... like FMX. It's an exclusive performance-boosting system that works on many levels under the most severe operating conditions. Fortified by a new-generation molecular structure, MAG 1 provides a very powerful, anti-wear oil film barrier. Heat from extreme engine loads triggers a chemical reaction that transforms the molecules in the oil, causing them to bond tightly together in a multi-layered, friction-fighting mesh. These reinforced layers create an oil film that retains multiple points of contact with engine surfaces to prevent metal-to-metal friction between rotating parts. The result is more consistent, reliable performance in the most extreme weather and operating conditions.

| Property                        | Method | Synthetic Blend |              |              | Full Synthetic |              |              |              |              |              |           |
|---------------------------------|--------|-----------------|--------------|--------------|----------------|--------------|--------------|--------------|--------------|--------------|-----------|
|                                 |        | 5W-20           | 5W-30        | 15W-40       | 0W-16          | 0W-20        | 5W-20        | 5W-30        | 5W-40        | 10W-30       | MV ATF    |
| Viscosity, cSt @40°C            | D-445  | 48.1            | 61.4         | 116.1        | 38.8           | 44.6         | 44.9         | 62.1         | 77.3         | 62.9         | 33.6      |
| Viscosity, cSt @100°C           | D-445  | 8.41            | 10.28        | 15.66        | 7.55           | 8.48         | 8.33         | 10.91        | 13.18        | 10.28        | 7.41      |
| Viscosity Index                 | D-2270 | 151.0           | 167.0        | 143.0        | 167.0          | 170.0        | 164.0        | 169.0        | 173.0        | 151.0        | 196.0     |
| Specific Gravity @60°F          | D-1250 | 0.855           | 0.855        | 0.873        | 0.843          | 0.847        | 0.847        | 0.846        | 0.855        | 0.850        | 0.852     |
| Flash Point, COC, °C (°F)       | D-92   | 220 (428)       | 220 (428)    | 224 (435)    | 226 (439)      | 226 (439)    | 228 (442)    | 227 (441)    |              | 225 (437)    | 216 (420) |
| Pour Point, °C (°F)             | D-97   | -45 (-49)       | -45 (-49)    | -36 (-33)    | -45 (-49)      | -45 (-49)    | -45 (-49)    | -45 (-49)    | -45 (-49)    | -42 (-44)    | -51 (-60) |
| CCS. Cp                         | D-5293 | 4816 (-30°C)    | 5325 (-30°C) | 5398 (-20°C) | 5463 (-30°C)   | 5800 (-35°C) | 3518 (-30°C) | 4400 (-30°C) | 6083 (-30°C) | 4000 (-25°C) |           |
| NOACK Volatility @700°F, % loss | D-5800 | <11.1           | <11.7        | <10          | <14.3          | <13          | <10.3        | <12          | <10          | <5.2         |           |
| Total Base Number (TBN)         | D-2896 | 7.0             | 7.0          | 10.0         | 7.0            | 7.9          | 7.0          | 7.9          | 9.8          | 7.0          |           |
| Sulfate Ash, wt %               | D-4929 | 0.71            | 0.71         | <1.0         | 0.90           | 0.90         | 0.71         | 0.90         |              | 0.71         |           |