



PRODUCT DATA SHEET

Macmillan Ring-Free™ FULL SYNTHETIC 0W-20 SN/GF-5 CODE: 552

Page | 1 OF 2

Macmillan Ring-Free™ (Macmillan) Full Synthetic Motor Oils 0W-20 is an advanced formula 100% full synthetic, fully licensed API SN-RC and ILSAC GF-5 multi-grade engine oils designed for vehicles operating under severe driving or extreme temperature conditions. They provide improved engine cleanliness and high temperature deposit protection. These products also help reduce oil consumption and provide exceptional cold flow properties.

Macmillan Ring-Free™ Full Synthetic oils exceed ILSAC GF-5 Standards and API Service SN-RC.

- Advanced Wear, Varnish and Sludge Protection
- Superior Protection Against Thermal Breakdown
- Outstanding Resource Conserving Performance

Macmillan Ring-Free™ Full Synthetic 0W-20 is a premium quality, full synthetic engine oil formulated from selected superior base oils and advanced high performance engine oil additive technology.

Macmillan Ring-Free™ Full Synthetic 0W-20 engine oil is formulated with low friction additives to help improve fuel economy where SAE 0W-20 is recommended and to provide outstanding engine protection. Macmillan full synthetic oils meet or exceed the latest American Petroleum Institute (API) SN-RC and car manufacturers ILSAC GF-5 service classification. Macmillan full synthetic oils are designed for turbo-charged and high RPM engines which experience high heat. They provide quick flow to critical parts at start up to reduce wear. It is the engine oil of choice for passenger cars, light trucks, powerboats, motorcycles and other stationary and mobile equipment when engine life and performance are important. Macmillan full synthetic oils meet all previous service classifications: API SM, SL, SJ, SH, SG, SF and ILSAC GF-4, GF-3, etc.

Macmillan Ring-Free™ Full Synthetic 0W-20 motor oil is designed especially for turbo-charged and high RPM engines which experience high heat. They provide quick flow to critical parts at start up to reduce wear. Macmillan full synthetic oils can be use in all services for all gasoline engines, domestic and foreign. Macmillan Full Synthetic Motor Oils are fully compatible with all other synthetic and petroleum based engine oils.

FEATURES

- Excellent protection from deposits at all operating temperatures
- Excellent anti-wear, anti-foam, anti-rust and corrosion protection
- Excellent cold cranking capabilities
- Excellent protection against accelerated oil consumption.



PRODUCT DATA SHEET

Macmillan Ring-Free™ FULL SYNTHETIC 0W-20 SN/GF-5 CODE: 552

APPLICATIONS

Macmillan Ring-Free™ Full Synthetic 0W-20, Motor Oils may be recommended for the following uses:

- When SN-RC, SM, SL, SJ, SH, SH, SG, SF, SE, SD or SC oils are required.
- When ILSAC GF-5, GF-4, GF-3, GF-2 oils are required
- When former MIL-L-46152D oils performance level is required
- When GM 609M is required
- When Ford M2C153H, M2C930-A (5W-20), M2C929-A(5W-30)
- When DaimlerChrysler MS10797 (5W-20), 10796 (5W-30), 10798 (10W-30), MS6395M
- In gasoline engines and turbo-charged engines

Listed below are the physical and chemical characteristics of Macmillan Full Synthetic Oils. Follow equipment manufacturer recommendations and conventional guides to determine the best oil for specific applications.

SAE GRADE:	0W-20	5W-20	0W-30	5W-30	10W-30 UL
Product Code	552	555	557	553	554
Density, lb./gal.	7.1	7.2	7.1	7.12	7.11
API Gravity	35.52	34.95	35.52	34.85	34.05
Cold Crank Simulation, mPa/s	6100	3900	5219	3900	4000
Viscosity @40°C, cSt	44.5	47.57	58.2	60.48	63.72
Viscosity @ 100°C, cSt	8.46	8.55	10.5	10.42	10.29
Viscosity Index	170	159	171	162	149
NOACK	13.1	13.8	8.4	12.0	11.0
Color ASTM	2.5	3	3	3	3
Water and Sediment (Pass/Fail)	Pass	Pass	Pass	Pass	Pass
Appearance	Clear	Clear	Clear	Clear	Clear
Pour Point: °C	-48	-45	-51	-45	-42
Flash Point: °C	216	225	226	240	250

AVAILABLE IN:

- Bulk
- 55 Gallon Drums
- 16 Gallon Quarter Drums
- 5 Gallon Pails